# **Healthy Environment**



# **Healthy Kids**

Environmental Health Curriculum
Pre-K through 2<sup>nd</sup> Grade
(with additional activities for older children, grades 3-5)

Developed as part of the Children's Pesticides, Asbestos, and Lead (PAL) Environmental Health Initiative. June 2000

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### **Section I: Overview**

# Baldwin County Children's Pesticides, Asbestos, and Lead (PAL) Environmental Health Initiative (March 1998 - June 2000)

The Baldwin County Children's Pesticide, Asbestos, and Lead (PAL) Environmental Health Initiative began in March 1998 through funding from the Environmental Protection Agency (EPA), Region IV, in Atlanta to the Rollins School of Public Health at Emory University. The objective of the Children's PAL Initiative is to develop a joint coordinated community and government partnership to reduce childhood exposures to pesticide, asbestos, lead, radon, PCB, and environmental tobacco smoke exposures through educational outreach activities. This effort is a Baldwin County based program that utilizes resources in the community and government to help empower families and neighborhoods to take better care of their children's environment.

A local PAL Advisory Board assisted the project. Environmentalists from EPA, local Health Department staff, school nurses and administrators from Oconee Regional Medical Center, Board of Education member, a nutrition specialist, and representatives from local government, the Housing Authority, and a Health Education professor from Georgia College and State University, participated in the development of the activities. The project activities partnered with community and school activities and included health fairs, curriculum development, and help with Earth Day activities. The project will leave with the Baldwin County community informational resources at Georgia College and State University and curricula for local heath educators to use to promote children's environmental health in community and school settings.

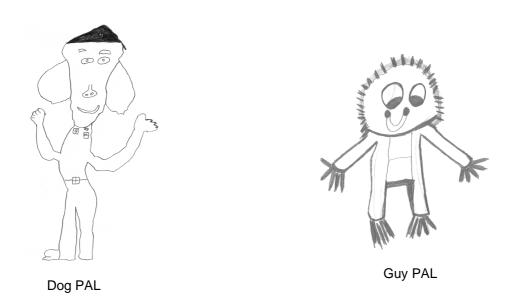
The project also trained a local school nurse in children's environmental health skills, provided speakers for the community forum at Oconee Regional Medical Center, and participated in health fair events during the *Week of the Child* (4/99), *Central State Hospital Health Fair* (5/99), *Back to School Health Fair* (8/99), and Head Start parents meeting (3/00). The project supported Earth Week 1999 and 2000 activities at local schools.

World PAL

#### **PAL Logo**

To develop a logo for the PAL Initiative, the project team approached the Principal of Midway Elementary School in Milledgeville, Georgia, to see if she would be interested in having her students participate in several Earth Week activities, one of which was a logo contest. She agreed and contest materials were sent to the Principal who distributed them to the teachers and then the students in grades K through second grade, the target group of the PAL Initiative. The contest asked that students draw a character that would help protect children's environment in the same way that

Smokey the Bear protects the forest. The contest took place during Earth Week festivities. The EPA judges chose a kindergarten, first grade, and a second grade winner who all received a prize on their school awards day. The three winning characters represented a "World PAL", a "Dog PAL", and a "Guy PAL". While the "World PAL", is the official overall EPA winner, the other two characters have been incorporated into the project materials as well. The adventures of the three "PALS" were designed to be of interest to children as they learn basic concepts related to children's environmental health



# **Background and Overview of Curriculum**

### **Curriculum Purpose**

The purpose of this curriculum is to teach children from Pre-Kindergarten to 2<sup>nd</sup> grade about their environment and health. They will learn how to keep themselves and the environment healthy. In addition, they will become knowledgeable about environmental health hazards and how to protect themselves against these hazards.

#### **How To Use This Manual**

The manual is divided into the following sections:

- Overview:
- Activity Grid;
- Healthy Environment Activities;
- Healthy Kids Eat Well Activities;

- Healthy Kids Keep Clean Activities;
- Healthy Kids Have Safe Homes Activities;
- Glossary; and
- Additional Resources and References.

The Overview includes an introduction to the curriculum and children's environmental health. The layout of the curriculum is described and underlying themes are explained.

The Activity Grid provides curriculum users with a snapshot view of the activities – including title of activity, appropriate grade level, Quality Core Curriculum objectives met, key messages, and if appropriate, exposure addressed. Educators may find it helpful to look at the Activity Grid when trying to initially determine what activity to use.

The next four sections include the individual activities grouped by Unit: (a) healthy environment; (b) eating healthy, (c) good hygiene, and (d) safe home. The remaining sections are a compilation of vocabulary terms found throughout the curriculum and a list of additional resources and references.

A CD-ROM accompanies the manual and contains copies of the worksheets and handouts. These documents are in PDF format and can be opened using Adobe Acrobat Reader, which can be downloaded from the World Wide Web at no cost (http://www.adobe.com/products/acrobat/readstep.html).

# **Curriculum Development**

#### Quality Core Curriculum

The curriculum materials were written to help meet the Quality Core Curriculum (QCC) proposed by Georgia's Department of Education. Many of the activity plans meet one of the Health/Physical Education topics and standards. A grid that presents the main curriculum topics and the corresponding QCC objectives is found in the second section of this curriculum.

#### Environmental Education Materials: Guidelines for Excellence

The US Environmental Protection Agency (EPA) Office of Environmental Education proposed The Guidelines for Excellence, which served as a standard in the development of these curriculum materials. In the curriculum, children learn about environmental topics with accurate, cited information. The activity plans were developed at a level appropriate for Pre-Kindergarten to 2<sup>nd</sup> grade children. The scope of the activity plan begins with basic skills and progresses to more advanced skills. Each lesson may also operate as a single educational event or serve as a part of a larger unit. Opportunities to apply knowledge and skills in the curriculum are built into the activities where children may practices skills and build their self-confidence in those skills such as hand washing. Each lesson plan is educationally sound in that it is directed by objectives, gives detailed background and instructions,

provides for different learning styles, and offers methods of evaluating knowledge or performance.

The following is a list of the EPA guidelines.

- 1) **Fairness and Accuracy:** Environmental education materials should be fair and accurate in describing environmental problems, issues, and conditions, and in reflecting the diversity of perspectives on them.
  - 1.1 Factual accuracy
  - 1.2 Balanced presentation of differing viewpoints and theories
  - 1.3 Openness to inquiry
  - 1.4 Reflection of diversity
- 2) **Depth:** Environmental education materials should foster awareness of the natural environment, an understanding of environmental concepts, conditions, and issues, and an awareness of the feelings, values, attitudes, and perceptions at the heart of environmental issues, as appropriate for different developmental levels.
  - 2.1 Awareness
  - 2.2 Focus on concepts
  - 2.3 Concepts in context
  - 2.4 Attention to different scales
- 3) **Emphasis on skill building:** Environmental education materials should build lifelong skills that enable learners to prevent and address environmental issues.
  - 3.1 Critical and creative thinking
  - 3.2 Applying skills to issues
  - 3.3 Action skills
- 4) **Action orientation:** Environmental education materials should promote civic responsibility, encouraging learners to use their knowledge, personal skills, and assessments of environmental issues as a basis for environmental problem solving and action.
  - 4.1 Sense of personal stake and responsibility
  - 4.2 Self-efficacy (e.g., self confidence)
- 5) **Instructional soundness:** Environmental education materials should rely on instructional techniques that create an effective learning environment.
  - 5.1 Learner-centered instruction
  - 5.2 Different ways of learning
  - 5.3 Connection to learners' everyday lives

- 5.4 Expanded learning environment
- 5.5 Interdisciplinary
- 5.6 Goals and objectives
- 5.7 Appropriateness for specific learning settings
- 5.8 Assessment
- 6) **Usability:** Environmental education materials should be well-designed and easy to use.
  - 6.1 Clarity and logic
  - 6.2 Easy to use
  - 6.3 Long-lived
  - 6.4 Adaptable
  - 6.5 Accompanied by instruction and support
  - 6.6 Make substantiated claims
  - 6.7 Fit with national, state or local requirements

#### **Overview of Children's Environmental Health and Topics**

# Why Focus On Children's Environmental Health?

Children live in an environment today with lots of new information, technology, and environmental hazards. They may be affected by contaminants in the air, water, soil, food, and home. Some of the environmental hazards include lead, pesticides, asbestos, and radon. Little is know how all of these chemicals affect children. The following section will describe why children are at higher risk for harmful effects from chemical exposures than adults are.

From birth to adolescence, children are continually developing. At birth, children's nervous, respiratory, and immune systems are not well developed. Therefore, chemicals may affect the growth of these systems. In addition, children may not be able to get rid of toxins in their bodies as well as adults. Children also take in more air when breathing, eat more foods and drink more liquids per pound than adults so they have the potential to be more exposed to chemicals.

The normal behavior of smaller children also places them at greater risk to be exposed to chemicals. In their younger years, children spend most of their time close to the ground where they may be exposed to dust, soil, or pesticide fumes. Children also put many things from their hands into their mouths. When playing, they spend more time outdoors where they are endangered by pollutants and chemicals in the air and soil. Consequently, it is important to teach children how to be safe at school and home to protect themselves from environmental hazards.

#### **Known Hazards for Children**

There are many environmental hazards that may affect the health of children. In the following section, we will describe some of major environmental threats. These include lead, pesticides, second-hand smoke, asbestos, and radon.

#### Lead

Lead poisoning is one of the most prominent environmental hazards facing children today. The Centers for Disease Control and Prevention (CDC) estimates that one in eleven children has high levels of lead in the blood. Lead gets into children's bodies when they swallow or breathe in dirt, dust, paint chips or fumes containing lead. It is difficult to recognize signs of lead poisoning because a person cannot see, taste or smell lead. Therefore, many parents do not know they have a lead problem in their home or school until their children become sick. In addition, some children with lead poisoning do not act or look sick.

Lead can be found around the home or school in things such as paint chips, dust, or dirt on shoes. A major source of lead poisoning is lead-based paint. When painted surfaces become old or degrade, dust or paint chips that fall off onto to windowsills, floors, or outdoors may contain lead. Paint dust or chips can stick to toys, fingers, and other objects that children will put into their mouths. Although lead paint was banned in 1978, homes and buildings constructed prior to this date probably contain lead-based paint.

Drinking water is another source of lead poisoning. Lead gets into drinking water when old pipes in homes or buildings or corrode, or when lead solder is used to connect pipes. Children in homes with pipes made before the 1930's with solid lead are at great risk. Water that has sat in pipes or is hot will have more lead. To reduce the lead threat in water, let tap water run for a few minutes before using and only use water from the cold-water tap for cooking and drinking. Other sources of lead are plastic window blinds made outside of the US, art, hobby, and craft supplies, gasoline for vehicles, decorative pottery and dishes, and old painted toys.

Lead in young children may cause damage to the brain and nervous system, behavior and learning disabilities, slowed growth, headaches, and hearing problems. Children younger than six are at most risk because their bodies are developing. Lead can be detected in children through a simple blood test. Getting children medical treatment and decreasing their exposure to lead may reduce the effects.

#### Key Messages for Children:

- Wash your hands often, especially after playing outdoors, touching an animal, before eating, or after touching paint chips, dust, or dirt.
- Keep thing like fingers, toys, paint chips, dirt, and other objects out of your mouth.

• Eat fruits and vegetables to help your body grow and to protect you against lead.

#### Key Messages for Parents:

- Wash toys, stuffed animals, and pacifiers regularly.
- Teach your child to make hand washing a habit.
- Clean window sills and hard floors with a damp cloth or mop.
- Try other hobbies that do not involve lead. Hobbies that may involve lead are making pottery, stained glass, and fishing. You can transfer lead dust from yourself to your child.
- If you work with lead in your job, shower and change clothes before going home. Jobs that may involve lead include battery manufacturing, auto repairs, and construction.
- If you think your child is at risk, talk to your health care provider and have your child tested for lead.

#### Pesticides

Pesticides are chemicals designed to control or get rid of "pests" such as insects, rodents, weeds, and bacteria. Examples of common pesticides are roach and insect sprays, chlorine bleach, disinfectants, and flea and tick shampoos for pets. Even though pesticides are beneficial to society, they can be dangerous to people. Most pesticides are toxic chemicals. When used improperly, overused, or stored within children's reach, pesticides can result in serious health problems, especially for children. Immediately following an exposure, pesticides may cause headaches, dizziness, tremors, coordination problems, blurred vision, and other problems. Long-term exposure to pesticides may damage the brain and the nervous system, disrupt the immune system, damage the liver and kidneys, cause infertility, and increase the risk of cancer.

Pesticides are used in homes, schools, and other buildings. These pesticides may settle in the air, on carpets, tables, toys and the grass where children play. The EPA reports that almost half of all households with children less than five years have at least one pesticide stored in an unlocked cabinet. Bathrooms and kitchens are the rooms most likely to have pesticides not properly stored.

#### Key Messages for Children:

- Stay away from chemicals or poisons.
- Keep thing like fingers, toys, paint chips, dirt, and other objects out of your mouth.

#### Key Messages for Parents:

• Store pesticides out of children's reach, preferably in locked cabinets.

- Always read and follow directions carefully when applying pesticides.
- Make sure children, their toys, and pets are not allowed in areas where pesticides are being used or were recently used.
- Use pesticides in well-ventilated areas.
- Do not transfer pesticides to other containers such as soda bottles or milk jugs that children may associate with food or drink.
- Use integrated pest management (IPM) to reduce exposure to pesticides. Instead of relying solely on pesticides to control pests, IPM uses natural biological pest control methods, such as introducing natural predators and removing the elements food, shelter, and water that pests need to survive.

#### Secondhand Smoke

Secondhand smoke, or environmental tobacco smoke (ETS), is a mixture of smoke given off by a cigarette, pipe, or cigar, and exhaled by smokers. It is a serious health risk to children because it may harm their developing lungs. The EPA estimates that between 150,000 and 300,000 infants and small children each year develop respiratory infections, such as bronchitis and pneumonia, due to ETS exposure. The CDC reports that children exposed to daily ETS miss a third more school days due to colds and infections than kids not exposed to smoke at home. Other effects of smoke on children include coughing and wheezing, chest pains, ear infections, and asthma. It may also cause more frequent and severe asthma attacks in asthmatic children, and it may even cause non-asthmatic children to develop the condition.

The major source of ETS for young children is in their home. A recent study estimates family members smoking in the home exposes 43% of US children to ETS. ETS exposure can also occur when a child enters a room where someone was recently smoking. It is important for people who smoke to smoke outdoors or in areas where children do not go.

Key Messages for Children:

Stay away from smoke.

Key Messages for Parents:

- Secondhand smoke is dangerous for infants, children and pregnant women.
- Do not allow other people to smoke in your home.
- Do not smoke around children in the house or enclosed areas such as cars.

#### Asbestos

Asbestos are natural mineral fibers. Known for their strength and fire-resistant properties, asbestos has been used in thermal insulation and fire proofing for buildings. The fibers are most harmful when they fall apart or are disturbed and

become air borne. Some asbestos fibers are tiny so they may be hard to see if they are floating in the air. If they are breathed into the lungs, they can increase the chances of developing lung cancer, mesothelioma (a cancer of the lining of the body cavities), and asbestosis, which causes shortness of breath and coughing.

### Key Messages for Children:

- Do not disturb or play with or around building materials
- Stay away from old or falling building materials.
- Tell parents or adults if you see materials falling apart in the home.

#### Key Messages for Parents:

• If there are any deteriorating building materials that could contain asbestos, lead, or other potential toxins in the home, contact the local health department or a local contractor for its removal.

#### Radon

Radon is a radioactive gas and is produced from the breakdown of uranium, which is found in the soil. It may seep into buildings and homes from the surrounding soil through cracks and holes in the building's foundation. When radon builds inside a building, it can cause health problems because its radioactive particles can get trapped in a person's lungs when he breathes and damage lung tissue. It can lead to lung cancer, especially if the person is already a smoker.

#### Key Messages for Parents:

- Learn about the risk of radon in your area.
- Test your home for radon with testing kits found in most hardware stores.
- Radon is the second leading cause of lung cancer.
- Smokers are at greater risk for cancer.

#### Asthma

Although asthma is not an environmental exposure, it is triggered by environmental allergens and irritants such as cigarette smoke, air pollution, aerosol sprays, and paint fumes in the environment. An estimated 4.8 children less than 18 years old have asthma, making it one of the most common chronic diseases of children. In addition, many more children may be undiagnosed. Asthma is the most common cause of missing school for children.

Asthma changes the normal function of the airway of the lungs. The muscles tighten and the lining of the lungs begins to swell, which reduces the diameter of the airways. Consequently, children have difficulty breathing. Wheezing and frequent coughing are potential signs of asthma. Allergens (dust, molds, pets) and irritants

(cigarette smoke, air pollution, fumes from chemicals) may trigger asthma. It is important to teach kids to avoid these triggers to prevent asthma attacks.

# **Layout of Curriculum**

#### **Curriculum Outline**

The curriculum will cover the following topics:

- Healthy Environment; and
- Healthy Kids:
  - Eat Well:
  - · Keep Clean; and
  - Have Safe Homes.

### **Activity Plan Outline**

Each topic has multiple activities. All activities have the following components:

- Title title of the activity
- Time estimated time to complete the activity
- Grade Level appropriate grade level for the children participating in the activity
- Educational Objectives what children will understand and/or be able to do at the completion of the activity
- Assessed Quality Core Curriculum (QCC) Standards The Quality Core Curriculum (QCC) includes content standards for all subjects K-8 and 9-12 courses in English/language arts, mathematics, science, social studies, foreign languages, fine arts, health, physical education, technology/career education, agriculture, and English Speakers of Other Languages (ESOL). The assessed QCC related to the content of the activity is outlined.
- Activity Description a detailed description of the activity
- Rationale a description of the rationale and background for educators
- Materials
  - Materials Provided supplies and equipment, needed to complete the activity, that are provided by curriculum developers
  - Materials Needed supplies and equipment, needed to complete the activity, that must be provided by the educator

- Vocabulary terms related to the activity
- Procedure detailed steps for implementing the activity
- Enrichment Activity (optional) an additional activity to supplement the main activity for learners who finish the activity early or who want to learn more about the topic
- Main Points a list of take home messages for the learner
- Assessment an opportunity to evaluate the learner's knowledge and performance based on the educational objectives
- References and Resources books and articles that provide the rationale for the activity and provide additional information related to the activity topic, including books, articles, brochures, pamphlets, and World Wide Web pages

# **Underlying Themes and Assumptions of the Curriculum**

The curriculum was developed keeping in mind the developmental stage of the audience. All activities incorporate strategies that will engage the learners.

# **Developmental Milestones**

This curriculum includes a wide variety of age appropriate activities and is designed to be used with children in preschool, kindergarten, and first and second grades (ages 3-7). According to Piaget's theory of development, children in ages 3-7 use language to try to make sense of the world, and they also begin to draw conclusions based on more than concrete experiences with objects. In addition they develop the ability to sort and classify objects based on different criteria, learn to count and use the concept of numbers. Children at the upper end of the age range (ages 6-7) are beginning to use logical reasoning and are able to conduct limited mental operations but only with concrete object situations or events.

(Citation: http://www.wpi.edu/~isg\_501/nsushkin.html#piaget)

The Early Childhood Care and Development group has identified five child development principles, two of which are specifically important to remember when conducting activities with children ages 3 – 7. First, development and learning occur continuously as a result of the child interacting with people and objects in his or her environment. The role of adults is essential in supporting a child's learning and in providing opportunities for learning. In addition, children must be provided with opportunities to make choices, experiment with ideas and situations and make discoveries. Second, children are active participants in their own development and learning, Children must have the opportunities to create their own knowledge through exploration, imitation of role models and interaction with materials. Activities should offer opportunities for

children to learn by doing, problem solving, and to develop communication skills. Children in this age group need activities that:

- assist them in developing their fine motor skills;
- provide opportunities to increase their language skill through talking reading, and singing; and
- offer environment in which they can learn cooperation, sharing and helping [with] others.

(Citation: http://www.ecdgroup.com/cdt.html)

Below are brief descriptions of the some of the developmental milestones experienced by children ages 3-7.

#### Preschoolers

#### Age 3

Children age three can typically:

- Complete a six-piece puzzle
- Draw simple shapes
- Like helping out with household tasks
- Count to three
- Sing a simple tune
- Identify some common colors
- Follow simple directions
- Understand some dangers, such as moving cars
- Interested in similarities and differences
- Enjoy making people laugh and developing a sense of humor

#### Age 4

Children age four can typically:

- Draw a face
- Complete puzzles with up to 12 pieces
- Sort by color and shapes
- Identify three colors and three shapes
- Thread small beads on a string
- Count seven objects and recognize some letters
- Follow three component directions
- Understand more dangers, both real and pretend
- Have an attention span of 10 15 minutes
- Recite age, name and town of residence
- Exhibit a sense of humor by acting silly and telling jokes

#### Kindergartners

### Age 5

Children age 5 can typically:

- Manipulate a pair of scissors well
- Learn to snap fingers, whistle and wink
- Remember stories and repeat them back
- Love jokes and riddles
- Count to 10 and identifies some letters
- Draw pictures of animals and people
- Understand comparative concepts such as taller, shorter, larger and smaller
- Understand concept of time
- Comprehend concepts of right and wrong

#### First Graders

#### Age 6

Children age 6 can typically:

- Think logically and have reasoning skills
- Understand the concepts of cause and effect
- · Learn well through active involvement
- Continue to develop fine motor skills
- Like silly rhymes, riddles and jokes

#### Second Graders

#### Age 7

Children age 7 can typically:

- Manipulate small tools well
- Have good balance
- Print own name
- Read
- Identify difference between left and right
- Enjoy planning and building activities
- Is interested in doing thing correctly
- Enjoy rule, rituals and routines

#### **Importance of Parent and Family Involvement**

Parents are very concerned about their children's safety and health. Therefore, it is crucial that they play a part in learning about environmental hazards. Parental involvement also helps reinforce the materials and messages found in this curriculum. It is important to get them involved and make sure they stay involved.

Environmental education should be "close to home." Children should learn how to apply new knowledge and behaviors to their surrounding. Therefore, it is a natural fit to include family members in these home activities where everyone gets a chance to learn and apply new information.

You must first get to know parents to build and maintain their involvement. One way to get them interested is sending out letters or notes to inform them what their child is learning about in the curriculum. Throughout the curriculum, take steps to keep parents involved:

- Print articles in the parent newsletter
- Give parent simple fact sheets about various environmental health topics
- Develop activities that families can do together at home to reinforce the curriculum messages
- Send notices about special observances such as Earth Day, National Lead Prevention Week, and National Poison Awareness Week
- Invite parents to special events such as lectures, health fairs, or PTA meetings where environmental health issues will be presented

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Section II: Activity Grid

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				Exp	Exposure			
Unit	Grade Level	Activity	Pesticides	Lead	Asbestos	Asbestos ETS/Radon	Quality Core Curriculum Objectives	Key Messages
pənu     uo	All grades	Bag Itl					<ul> <li>Visual Arts – use a variety of materials to construct something</li> </ul>	To discuss the meaning of Earth Day and importance of recycling.
Secti isuos	All grades	Spread the Word					<ul> <li>Visual Arts – use a variety of materials to construct something -</li> </ul>	To discuss the meaning of Earth Day and how they can help save the environment.

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1		A 0.411, 1141,	( ) ( ) ( ) ( ) ( ) ( )		Exposure	2 C/ OF L			
	Grade Level	Activity	resticides	read	Aspestos	E I S/Kadon	Suality C OR	Quality core curriculum Objectives	Ney Messages
	-						• Foods/	Foods/Nutrition - select	To familiarize children with
	Pre-K to 2 <sup>nd</sup>	"Felt"astic		\			nutritio	nutritious foods	foods to prevent lead
	grade	Foods		>			<ul> <li>Lifesty</li> </ul>	Lifestyle – explain	poisoning.
							health	health and nutrition	
							practices	es	
							• Foods/	Foods/Nutrition –	To discuss importance of
	Kindergarten	Pick and		\			identify	identify foods by name	healthy ideas, name fruits and
II	t	Choose		>			and se	and select nutritious	vegetables, and identify their
lθV	2 <sup>nd</sup> grade						foods		favorite fruits.
							<ul> <li>Lifesty</li> </ul>	Lifestyle – explain	
							health	health and nutrition	
							practices	es	
cti Ki							<ul> <li>Person</li> </ul>	Personal Health –	To wash fruits and vegetables
	Pre-K to	Fruit and	\				recogn	recognize germs cause	before eating or cooking them.
ijΕ	Kindergarten	Veggie Wash	>				sickne	sickness, and how	
:ə							person	personal health	
1							decisio	decisions affect others	
							<ul> <li>Diseas</li> </ul>	Disease Prevention –	To reinforce key concepts such
	Kindergarten	Be a PAL	\	\		\	recogn	recognize germs cause	as hand washing and eating
	to	Coloring Book	>	>		>	sickne	sickness, and how	nutritious foods.
	2 <sup>nd</sup> grade	Activity					person	personal health	
							decisio	decisions effect others	
							• Foods/	Foods/Nutrition - select	
							nutritio	nutritious foods	

				T Y	Evnociire			
Unit	Grade Level	Activity	Pesticides	Lead	Aspestos	ETS/Radon	Quality Core Curriculum Objectives	Key Messages
	Pre-K to 1st grade	A Toy Bath		>			<ul> <li>Hygiene – recognize importance of hygiene</li> <li>Germs – germs cause sickness</li> </ul>	To teach children how to wash toys.
	Pre-K to 1 <sup>st</sup> grade	Keeping Me Clean		>			<ul> <li>Hygiene – recognize importance of hygiene</li> <li>Poison – practice safe behaviors</li> </ul>	To reinforce positive habits after playing outside.
ษ <del>ย</del>	Pre-K to Kindergarten	A Day in the Life of PAL	>	>			<ul> <li>Hygiene – recognize importance of hygiene</li> <li>Germs – germs cause sickness</li> </ul>	To teach children when to wash their hands.
tion V Is Keep Clo							Writing – write a minimum of 3 sentences & communicate ideas	
Sec Healthy Kio	1 <sup>st</sup> to 2 <sup>nd</sup> grade	A Day in the Life of PAL: Lesson 2	>	>			<ul> <li>Hygiene – recognize importance of hygiene</li> <li>Germs – germs cause sickness</li> <li>Writing – write a minimum of 3</li> </ul>	To teach children when to wash their hands.
							sentences & communicate ideas	
	Pre-K to Kindergarten	Wash, Wash, Wash Your Hands		>			<ul> <li>Hygiene – recognize importance of hygiene</li> <li>Germs – germs cause sickness</li> </ul>	To describe why cleanliness is important to health and the importance of being in charge of our bodies.
							<ul> <li>Personal Health – how personal health decisions effect others</li> </ul>	

				Exp	Exposure			
Unit	Grade Level	Activity	Pesticides	Lead	Asbestos	ETS/Radon	Quality Core Curriculum Objectives	Key Messages
_	Kindergarten to 1 <sup>st</sup> grade	Three PALS for Kids Puppet Video	>	>		>	<ul> <li>Poison – practice safe behaviors</li> <li>Hygiene – demonstrate proper hand washing techniques</li> <li>Foods – select nutritious foods</li> </ul>	To teach students when they should wash their hands, not to touch chemicals and avoid cigarette smoke.
V noitoe∂ ontinue	Pre-K to 2 <sup>nd</sup> grade	PAL Says	>	>			Hygiene – recognize importance of hygiene	To reinforce healthy behaviors.
	Kindergarten to 2 <sup>nd</sup> grade	Be a PAL Coloring Book Activity	>	>		>	<ul> <li>Poison – practice safe behaviors</li> <li>Personal Health – recognize germs cause sickness, and how personal health decisions effect others</li> </ul>	To reinforce key concepts.

	1	1		Exp	Exposure			
•	Grade Level	Activity	Pesticides	Lead	Asbestos	ETS/Radon	Quality Core Curriculum Objectives	Key Messages
×	Kindergarten to 2 <sup>nd</sup> grade	Safe House Sleuth	>				<ul> <li>Poison – practice safe behaviors</li> </ul>	To recognize various household items like pesticides and poisons.
X	Kindergarten to 2 <sup>nd</sup> grade	Be Safety Smart!	>	>	>	>	<ul> <li>Poison – practice safe behaviors</li> <li>Safety – recognize safe practices</li> </ul>	To explain the importance of safety rules and identify environmental hazards.
×	Kindergarten to 2 <sup>nd</sup> grade	Be a Home Detective	>	>	>		Safety - recognizes safe practices experienced in the	To stay away from poisons in your home.
							nome, at school, on the playground, in and around motor vehicles, on the street, in aquatic environments and around animals	you finish playing.  To wash your hands with soap and water.
							Safety – identifies local support system concerning personal safety (e.g., family, teacher, religious advisor, friend and counselor)	To know who to call in an emergency.
							<ul> <li>Safety - demonstrates ways to prevent and respond to accidents in and around the home</li> </ul>	
							Personal Health -     recognizes ways to     prevent disease by     keeping the home,     school, and community     clean	

# **Section III: Healthy Environment**

#### Introduction

This section is about the importance of a healthy environment. Learners will understand the importance of protecting the environment.

#### **Activities**

My World Is Your World (Kindergarten to 1st grade)

If a Tree Could Talk (Kindergarten to 1st grade)

Invention Time (Pre-Kindergarten to 2<sup>nd</sup> grade)

Take Charge (1<sup>st</sup> to 2<sup>nd</sup> grades)

Write and Tell (1<sup>st</sup> to 2<sup>nd</sup> grades)

E Hazards Video (3<sup>rd</sup> to 5<sup>th</sup> grades)

Bag It! (All grades)

Spread the Word (All grades)

# My World Is Your World

# **Activity Description:**

The educator will read a story about recycling and engage the learners in a dialogue about the importance of recycling and some materials that are recyclable.

# **Educational Objectives:**

At the end of the activity, the learners will be able to:

- 1. Name some recyclable materials.
- 2. Describe new uses for recycled materials.

# Assessed Quality Core Curriculum (QCC) Standards:

Fine Arts (Grade: K)
Strand: General Music

**Topic:** Artistic Skills and Knowledge: Creating, Performing,

Producing

**Standard:** Participate in song stories, singing games, and musical

dramatizations.

Fine Arts (Grade: 1) Strand: General Music

**Topic:** Artistic Skills and Knowledge: Creating, Performing,

Producing

**Standard:** Participates in group singing of rote songs.

Health/PE (Grade: 2) Strand: Personal Health

**Topic:** Sanitation

**Standard:** Recognizes ways to prevent disease by keeping the

home, school, and community clean.

#### Rationale:

Keeping a clean and safe environment can improve our lives physically, mentally, and socially. One area where we impact the environment is the amount of solid waste that we produce. Solid waste is any kind of non-liquid trash, such as paper, glass, and cardboard. One way of reducing solid waste is by recycling or reusing materials. Sometimes people do not realize that there is

#### **Grade Level:**

Kindergarten to 1<sup>st</sup> grade



Time:

15 minutes



#### Materials Provided:

- 1. "Reduce, Reuse Recycle" book
- "My Neighborhood" worksheet

#### **Materials Needed:**

- 1. Examples of recyclable and non-recyclable materials (i.e. cans, cardboard, glass, and paper)
- 2. Crayons

anything else they can so with the things they throw out. By being able to identify recyclable materials and ways to reuse them, the children will learn what can and cannot be recycled through visual examples.

# Vocabulary:

**Recycle:** to collect and process to be used again in a form similar to its original form such as old newspapers used to make new ones

Recover: to adapt to a new use

Reuse: to use material again

Solid waste: any trash that is not a liquid

#### Procedure:

1. Have the learners gather in a circle if possible.

- 2. Tell the learners you will be talking about ways to help the earth stay clean.
- 3. Read the story "Reduce, Reuse, Recycle" to the learners.
- 4. Reinforce the song in the book by singing it a few times after the story is over.
- 5. Review examples of recyclable materials.

#### Main Points:

Recycling is fun and easy!

#### Assessment:

Hold up examples of recyclable and non-recyclable materials and have the learners decide whether or not the items can be recycled.

#### **References and Resources:**

Williams, R. L. (1994). <u>Reduce, Reuse, Recycle.</u> Cypress, CA: Creative Teaching Press, Inc.

# Optional Enrichment Activity:

- The learners can bring a copy of the song home and teach it to their parent(s).
- 2. Distribute the "My Neighborhood" worksheet and crayons have the learners draw a picture of the things they like most about their neighborhood.

# My Neighborhood

Draw a	picture	about the	things	vou like	most ab	out vour	neighbo	rhood.
				,		,		

# If A Tree Could Talk

# **Activity Description:**

The educator will read a story about the environment and engage the learners in a dialogue about the importance of keeping the earth clean.

# Educational Objectives:

At the end of the activity, the learners will be able to:

- 1. Describe their environment.
- 2. Discuss potential ways to protect their environment.
- 3. Discuss the meaning of Earth Day.

# Assessed Quality Core Curriculum (QCC) Standards:

Language Arts (Grade: K)
Strand: Oral Communication
Topic: Listening/Speaking

Standard: Listens and speaks in informal conversations with peers

and adults.

Language Arts (Grades: K, 1) Strand: Oral Communication Topic: Listening/Speaking

**Standard:** Listens to a variety of literary forms, including stories

and poems.

#### Rationale:

The environment is everything around us. Keeping a clean environment improves our lives physically, mentally, and socially. This activity will help learners define how they feel about the environment and describe why it is important to protect it.

#### Vocabulary:

None

#### **Grade Level:**

Kindergarten to 1<sup>st</sup> grade



#### Time:

15 minutes



# Materials Provided:

 "If A Tree Could Talk" book

#### Procedure:

- 1. Have the learners gather in a circle if possible.
- 2. Tell the learners you will be talking about ways to help the Earth stay clean.
- 3. Read the story "If A Tree Could Talk" to the learners.

#### Main Points:

It is important to remember to protect our planet.

Assessment:

Have learners identify ways they can help save the environment, trees, animals, and lakes and rivers.

### References and Resources:

Williams, R. L. (1994). <u>If A Tree Could Talk.</u> Cypress, CA: Creative Teaching Press, Inc.

# Optional Enrichment Activity:

Have the learners draw a picture of themselves doing something to clean up the Earth. They should take the picture home to show their parent(s).

# **Invention Time**

#### **Activity Description:**

The students will use discarded or recycled items and containers to create art projects.

# **Educational Objectives:**

At the end of the activity, the learners will be able to:

- 1. Name some recyclable materials.
- 2. Describe new uses for recycled materials.
- 3. Create crafts out of recycled materials.

# Assessed Quality Core Curriculum (QCC) Standards:

Fine Arts (Grades: K,1,2)

Strand: Visual Arts

**Topic:** Artistic Skills and Knowledge: Creating, Performing,

Producing

**Standard:** Use a variety of art materials and techniques to model,

construct, and compose original artworks.

Health/PE (Grade: 2) Strand: Personal Health

**Topic:** Sanitation

**Standard:** Recognizes ways to prevent disease by keeping the

home, school, and community clean.

#### Rationale:

Keeping a clean and safe environment can improve our lives physically, mentally, and socially. One area where we impact the environment is the amount of solid waste that we produce. Solid waste is any kind of non-liquid trash, such as paper, glass, cardboard, to name a few. One way of reducing solid waste is by recycling or using materials. Sometimes students do not realize that there is anything else they can do with the things they throw out. Using a creative approach to recycling will help them associate the activity with fun!

#### **Grade Level:**

Pre-Kindergarten to 2<sup>nd</sup> grade



Time:

20 minutes



# Materials Needed:

- Discarded items: plastic/ paper bags, lids, egg cartons, popsicle sticks, milk jugs
- 2. Glue
- 3. Markers
- 4. Scissors
- 5. Tape
- 6. Pipe cleaners
- 7. Construction paper
- 8. Crayons

# Vocabulary:

**Recycle:** to collect and process to be used again in a form similar to its original form such as old newspapers used to make new ones

Reuse: to use material again

Solid waste: any trash that is not a liquid

#### **Procedure:**

A) Three days before the activity, ask students to:

- Save items that are normally thrown away in the classroom, the cafeteria or the school office until you have enough to give one item to each child. These items could be rinsed out milk or yogurt cartons, envelopes, or paper notices.
- 2. Place items and art supplies on a table.
- B) Day of activity:
- 1. Start with a discussion on recycling and why that is a good thing to do at home, at school, and in the community.
- 2. Tell students that they can pick items off the table with which to create an art project. There are no rules in making it.
- 3. Give them all 10 minutes to design their 'creations.' Warn them when they have 5 minutes left.
- 4. Recap with discussion on the value of reusing resources again. Ask for volunteers to talk about what items they used to make their project.

#### Main Points:

- 1. Recycling is easy and fun.
- 2. Just because it's garbage, doesn't mean it has to be thrown away.

# Optional Enrichment Activity:

Have the student take their creation home and explain to their parent(s) what it is made out of and the newly found use for that item.



# Assessment:

Discuss with the students things at home that are normally thrown away. How can they make the items into an art project or something new?

# References and Resources:

None

# Take Charge

# **Activity Description:**

The children will learn the importance of recycling. They will collect recyclable materials as a class or group.

# **Educational Objectives:**

At the end of the activity, the learners will be able to:

- 1. Discuss the importance of recycling in their community.
- 2. List materials that can be recycled.
- 3. Participate in a group-recycling project.

# Assessed Quality Core Curriculum (QCC) Standards:

Guidance (Grades: 1,2) Strand: Self-knowledge

**Topic:** Skills to interact with others

**Standard**: Demonstrate group membership skills.

#### Rationale:

The environment plays a role in our well being. Keeping a clean and safe environment can improve our lives physically, mentally, and socially. One area where we impact the environment is the amount of solid waste that we produce. Solid waste is any kind of non-liquid trash, such as paper, glass, or cardboard. One way of reducing solid waste is by recycling. By participating daily in the recycling program, the children will learn what can and cannot be recycled through visual examples.

#### Vocabulary:

Alter: to change

**Recycle:** to collect and process to be used again in a form similar to its original form such as old newspapers used to make new ones

Recover: to adapt to a new use

#### **Grade Level:**

1<sup>st</sup> to 2<sup>nd</sup> grades



Time:

20 minutes



 "My Neighborhood: Take 2" worksheet

#### **Materials Needed:**

- 1. Recycling bins or cardboard boxes
- 2. Art supplies (to decorate a box if a plastic recycling bin is not available) including construction paper, scissors, glue
- 3. Recyclable materials (newspaper, glass containers, soda cans, plastic jugs)

Reuse: to use material again

Solid waste: any trash that is not a liquid

#### Procedure:

1. Discuss why recycling is important to the environment.

- 2. Ask the learners to name materials that can be recycled and show them the examples.
- 3. Explain that as part of the Earth Week, the room will set up a recycling center.
- 4. If there are no recycling bins available use cardboard boxes. Have the learners decorate the bins/boxes with Earth Day messages. Earth Day messages include: Reduce, Reuse, Recycle; Keep Our Earth Clean; and Happy Earth Day!
- 5. Identify cardboard, plastic, and aluminum items that can be recycled.
- 6. Have the learners bring in recyclables from home and their lunches. Invite them to talk to their families about recycling.
- 7. Stress that the items MUST be washed and clean before they are put in the bins.
- 8. The learner who brings in the most items wins the incentive.

[Note: While this activity is designed for Earth Week, it can be adapted for other times of the year.]

#### Main Points:

Recycling is an easy way to reduce waste and pollution to keep the environment clean.

# Assessment:

Ask the learners why it is important to recycle. Throughout the week, hold up items that are in the garbage and ask the learners whether or not it should have been recycled. Have them explain why or why not.

#### References and Resources:

The Environmental Protection Agency. (2000). Recycle City. [Online] Available at: http://www.epa.gov/kids/recyclecity.htm

# Optional Enrichment Activity:

- 1. If the learners do not recycle at home, have them talk to their parent(s about starting a program there. If they do recycle, the learners should talk to their parent(s) about becoming involved with collecting the recycling at home.
- Find out where they can drop off recycled materials in their community (i.e. local grocery store or recycling center).
- 3. Distribute the "My Environment: Take 2" worksheet. Have the learners answer the questions and share them with others.

# My Neighborhood: Take 2

The following questions ask you to think about your environment and neighborhood.

What three things do you like most about your neighborhood?
1
2
3
What three things do you dislike most about your neighborhood?
1
2
3
Tell us what you feel and think about things you see, hear, and smell.
Tell us how you would like to change things.

# Write and Tell

# Activity Description:

The learners will write a short story or poem about their feelings on the environment and protecting it.

# Educational Objectives:

At the end of the activity, the learners will be able to:

- 1. Describe their environment.
- 2. Discuss potential ways to protect their environment.

# Assessed Quality Core Curriculum (QCC) Standards:

Language Arts (Grades: 1,2)
Strand: Written Communication

**Topic:** Writing

**Standard:** Writes a minimum of three sentences about a topic.

#### Rationale:

The environment is everything around us. Keeping a clean environment improves our lives physically, mentally, and socially. This activity will help the learners define how they feel about the environment and describe why it is important to protect it.

### Vocabulary:

None

#### Procedure:

- 1. In conjunction with Earth Week, tell the learners that this activity will focus on the environment.
- 2. By the end of the week, ask the learners to write a short story (variable, approximately 1 paragraph) or poem about the environment and the importance of protecting it.

#### **Grade Level:**

1<sup>st</sup> to 2<sup>nd</sup> grade



Time:

Variable



#### **Materials Needed:**

- 1. Pencil
- 2. Paper

- 3. After the end of the week, choose a few learners to share their work. Ask for volunteers to share their work.
- 4. Place stories/poetry on class/hallway bulletin boards to share with others.

[Note: While this activity is designed for Earth Week, it can be adapted for other times of the year.]

### Main Points:

Increase the learners understanding of how they feel about the environment and protecting the Earth.



#### Assessment<sup>,</sup>

During free time throughout the week, have the learners take out their stories/poems and work on them. Ask for questions. Assessment will take place when the educator reviews the completed essays/poems.

#### References and Resources:

None

# E Hazards Video

# **Activity Description:**

This activity will involve the "E Hazards: They're Out There..." video (see the E Hazards: They're Out There..." video outline). The main characters of the video, Wolf and Lana, identify E hazards and safety tips for kids. In addition to the video, there are E Hazards booklets or photocopies of the booklet.

# **Educational Objectives:**

At the end of the activity, the learners will be able to:

- 1. List the six environmental hazards covered.
- 2. Describe at least one tip they can use to protect themselves or their families for each of the six environmental hazards.
- 3. Identify potential hazards in their homes and discuss "E Hazard" safety tips with their families.

# Assessed Quality Core Curriculum (QCC) Standards:

Health/PE (Grade: 3)

Strand: Alcohol, Tobacco & Other Drugs

Topic: Consequences

**Standard:** Assess the physical, mental and social consequences of

using alcohol, tobacco products and other drugs.

Health/PE (Grade: 3)

Strand: Alcohol, Tobacco & Other Drugs

Topic: Decision Making

Standard: Apply decision-making steps to avoid threatening

situations.

Health/PE (Grade: 4)

Strand: Alcohol, Tobacco & Other Drugs

**Topic:** Effects

Standard: Examine the affects of tobacco products on the

respiratory and circulatory systems.

Health/PE (Grade: 5)

Strand: Alcohol, Tobacco & Other Drugs

**Topic:** Effects

**Standard:** Summarizes the dangers of taking medicines or drugs.

#### **Grade Level:**

3<sup>rd</sup> to 5th grade



Time:

30 minutes



Materials Provided:

- 1. Video
- 2. Video booklet for duplication
- 3. "Can You Decode the Secret Message" worksheet

Healthy/PE (Grade: 3) Strand: Family Living Topic: Communication

**Standard:** Recognize the importance of discussing health issues

with one's family.

Health/PE (Grade: 3)

Strand: Safety

**Topic:** Accident Prevention

**Standard:** Apply appropriate prevention strategies when around

electricity, firearms, fireworks, and water.

Health/PE (Grade: 4)

Strand: Safety

**Topic:** Accident Prevention

Standard: Predict the consequences of individual behavior related

to accidents and injuries.

Health/PE (Grades: 4, 5)

**Strand:** Safety **Topic:** Resources

**Standard:** Identify local support systems concerning personal

safety (i.e. family, teachers, religious advisors, friends or

counselors).

#### Rationale:

There are a number of reasons why children are vulnerable to environmental health risks.

- 1. Children are more susceptible to environmental threats, because their bodies are still developing and growing.
- 2. Children are at greater risk from environmental threats, because pound for pound they breathe more air, drink more water and eat more food than adults.
- 3. Children are exposed to different environmental hazards, because they are least able to protect themselves since they may not recognize an environmental threat when they see one.
- 4. Children are at greater risk, because they have fewer life experiences than adults do.

# Vocabulary:

**Household Products**: includes cleaners, disinfectants, pesticides, paint, paint strippers, wood preservatives, aerosol sprays, insect repellants, air fresheners, stored fuels automotive products and hobby supplies

**Lead:** a heavy metal that is hazardous to health if breathed or swallowed; it is found in old paint, dirt, and dust; a mineral that can be found in old paint, water, soil, and dust. Children can swallow lead or breathe lead-contaminated dust if they play in dust or dirt and put their fingers or hands in their mouth or on objects that they put in their mouth(s); poison that can make you sick

**Pesticides:** chemicals or organic agents used to kill insects, plants, rodents, fungi or microscopic organisms

**Secondhand Tobacco Smoke:** a mixture of smoke given off by the burning end of a cigarette, pipe or cigar and the smoke exhaled from the lungs of a smoker

**UV rays:** ultraviolet rays come from the sunlight, and can burn skin and seriously harm people's health

#### Procedure:

- 1. Introduce the video to the learners. Say, "Today we will learn about environmental hazards that may be harmful to children like yourselves. We will be watching a video called "E Hazards: They're Out There..." There are two kid detectives named Wolf and Lana who seek out E Hazards. I want you to pay close attention and be able to tell me about the E Hazards they find.
- 2. Play the video for the learners.
- 3. Ask the learners to name the E Hazards that were discussed in the video. For each E Hazard, ask them to describe ways in which they can protect themselves from these hazards.

#### Main Points:

# **E-Hazard: Household Products**

- Recognize warning labels.
- Be careful when using them.
- Use in well-ventilated area.
- Keep in original container.
- Have an adult clean up spills.

# E-Hazard: Second Hand Smoke

- Ask permission to leave the room.
- Open a door or window.
- Turn on a fan or roll down the car window.

#### E-Hazard: Pesticides

- Avoid attracting pests.
- Keep food in airtight containers.
- Take out trash regularly.
- Plug cracks in baseboards and pipes.
- Try non-toxic alternatives.
- Use helpful insects.
- Weed by hand.
- Mow the lawn properly.
- Empty standing water containers.

# If you **do** have to use pesticides:

- Use the least toxic chemicals.
- Follow label instructions.
- Store in safe places.

# E-Hazard: UV Light

- Pay attention to the UV index daily.
- Wear sunscreen with the highest SPF.
- Wear protective clothing.
- Stay in shaded areas.

#### E-Hazard: Lead

- Never remove flaky paint yourself.
- Don't handle old painted surfaces.
- Keep toys and play surfaces clean.
- Wash hands before meals and bedtime.
- Run cold water 30-60 seconds before drinking.

#### E-Hazard: Contaminated Water

- Never drink from unsafe water.
- Never swim in unsafe water.
- Never eat fish from unsafe water.
- Never contaminate water.



# Assessment:

After the video, ask learners as a group to:

- 1. Identify the six environmental hazards presented in the video.
- 2. For each hazard, ask them to describe ways to protect themselves and their families.
- 3. Ask if they have any questions about what was presented in the video and the follow-up discussion.
- 4. Ask them to be detectives like Lana and Wolf and look for potential E Hazards in and around their homes and talk to their parents about them. Have the learners report their findings to the class the next day.

### References and Resources:

United States Environmental Protection Agency, Region 6, Water Quality Protection Division Outreach Team. (1999). <u>E Hazards: They're Out There...</u> [Booklet].

# E-Hazards: They're Out There . . .

# **Running Time: 15 minutes**

# **VIDEO OUTLINE**

Approximate Time	<u>Topic</u>
0:00	Introduction
1:40	E-Hazard: Household Products
	<ul> <li>Key Messages:</li> <li>Recognize warning labels.</li> <li>Be careful when using.</li> <li>Use in well-ventilated area.</li> <li>Keep in original container.</li> <li>Have an adult clean up spills.</li> </ul>
3:45	E-Hazard: Second Hand Smoke
	<ul><li>Key Messages:</li><li>Ask permission to leave the room.</li><li>Open a door or window.</li><li>Turn on a fan or roll down the car window.</li></ul>
5:25	E-Hazard: Pesticides
	<ul> <li>Key Messages:</li> <li>Avoid attracting pests.</li> <li>Keep food in airtight containers.</li> <li>Take out trash regularly.</li> <li>Plug cracks in baseboards and pipes.</li> <li>Try non-toxic alternatives.</li> <li>Use helpful insects.</li> </ul>

Weed by hand.Mow the lawn properly.Empty standing water containers.

If you do have to use pesticides:

- Use the least toxic chemicals.
- Follow label instructions.
- Store in safe places.

# 7:40 **E-Hazard: UV Light**

# Key Messages:

- Pay attention to the UV index daily.
- Wear sunscreen with the highest SPF.
- Wear protective clothing.
- Stay in shaded areas.

### 9:05 E-Hazard: Lead

# Key Messages:

- Never remove flaky paint yourself.
- Don't handle old painted surfaces.
- Keep toys and play surfaces clean.
- Wash hands before meals and bedtime.
- Run cold water 30-60 seconds before drinking.

### 10:40 E-Hazard: Contaminated Water

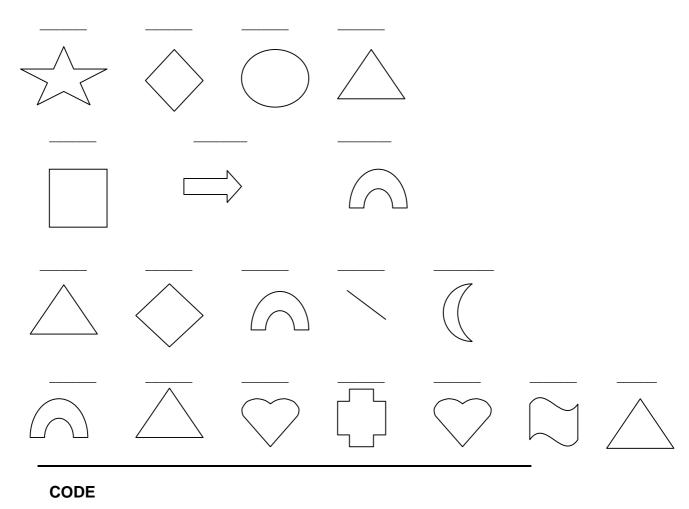
# Key Messages:

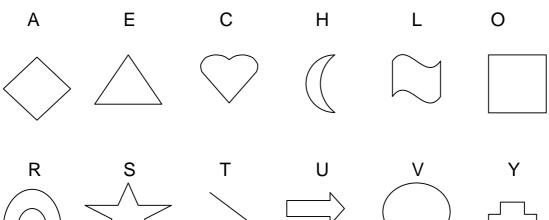
- Never drink from unsafe water.
- Never swim in unsafe water.
- Never eat fish from unsafe water.
- Never contaminate water.

# 12:45 **Wrap-Up**

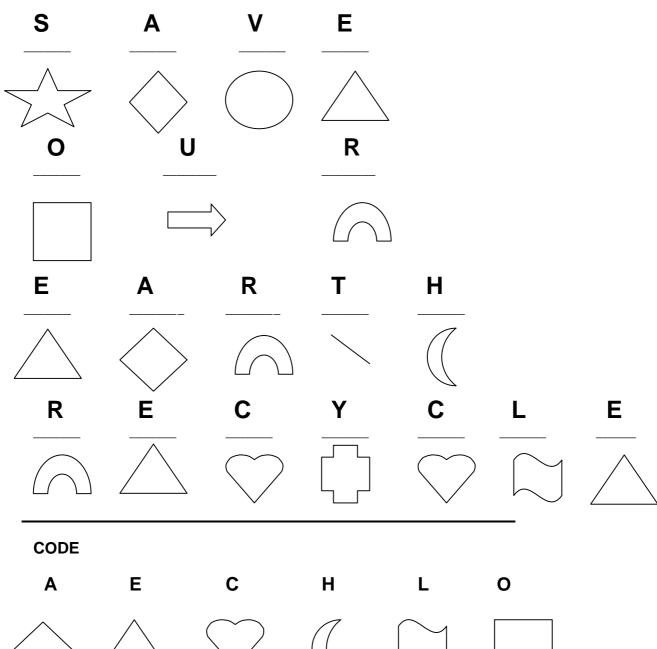
- Ground Level Ozone
- Radon
- Asbestos

# Can You Decode the Secret Message? The code is at the bottom of the page.

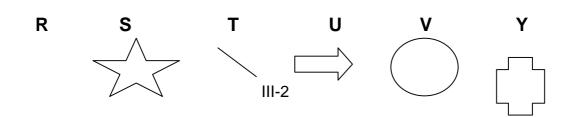




# Can You Decode the Secret Message? Answers The code is at the bottom of the page.







# Bag It!

# **Activity Description:**

This activity should be held in conjunction with Earth Week. It helps to promote reuse and recycling of paper grocery bags.

- 1. The educator must contact a local grocery store before the activity to explain the activity and borrow enough paper bags for each learner.
- 2. The learners will decorate the bags with environmental messages and pictures.
- 3. The bags are then returned to the grocery store to be distributed to customers.

# **Educational Objectives:**

At the end of the activity, the learners will be able to:

- 1. Discuss the meaning of Earth Day.
- 2. Describe the importance of recycling.

# Assessed Quality Core Curriculum (QCC) Standards:

Fine Arts (Grades: K, 1, 2)

Strand: Visual Arts

**Topic:** Artistic Skills and Knowledge: Creating, Performing,

Producing

**Standard:** Uses a variety of art materials and techniques to model,

construct, and compose original art works.

#### Rationale:

Increasing environmental awareness does not have to be expensive. Increasing community involvement and displaying that the learners care about the environment is an effective way to educate the public.

#### **Grade Level:**

All Grades



Time:

20 minutes



Materials Needed:

- 1. Paper grocery bags
- 2. Markers or crayons

# Vocabulary:

Alter: to change

**Recycle:** to collect and process to be used again in a form similar to its original form such as old newspapers used to make new ones

Recover: to adapt to a new use

Reuse: to use material again

#### Procedure:

1. Pass out the bags collected from local grocery stores.

- 2. Have the learners decorate the bags with pictures of the earth, environmental messages, or the name of their school. Tell them to be creative!
- 3. Collect the bags and return them back to the educator to deliver them back to the grocery stores.

#### Main Points:

- 1. Recycling is easy and fun.
- 2. It does not take a lot of effort to make a big difference and raise environmental awareness.
- 3. Recycling reduces waste and saves money.

#### Assessment:

Next week, ask the learners if they went to the grocery store. What did they observe? Were people using the decorated grocery bags?

#### References and Resources:

All materials can be found at the Earth Day Groceries Project, 2000. The Earth Day Groceries Project web site is copyright © 1994-2000. Unauthorized publication of any material from the Project web site is prohibited. Schools and non-profit organizations may use material (excluding photographs) from the website in their publications, noting the source Project web site. Available at: http://www.earthdaybags.org/

# Optional Enrichment Activity:

Ask the learners to accompany their parent(s) to a participating grocery store this week to view the decorated bags.

United States Environmental; Protection Agency. (2000). Earth Day Groceries Project. [Online] Available: http://www.earthdaybags.org/

United States Environmental; Protection Agency. (2000). The Earth Day Groceries Project Starter Kit. [On-line] Available: http://www.earthdaybags.org/starter.htm

# Spread The Word

# Activity Description:

The learners will create their own Earth Day artwork or color the Happy Earth Day Activity Book. The art or activity book pages will be displayed in the classroom during Earth Week.

# **Educational Objectives:**

At the end of the activity, the learners will be able to:

- 1. Describe the reasons for Earth Day and Earth Week.
- 2. Identify different ways that they can help the environment as part of Earth Day and Earth Week.

# Assessed Quality Core Curriculum (QCC) Standards:

Fine Arts (Grades: K, 1, 2)

Strand: Visual Arts

**Topic:** Artistic Skills and Knowledge: Creating, Performing,

Producing

Standard: Uses a variety of art materials and techniques to model,

construct, and compose original art works.

#### Rationale:

In 1969, Senator Nelson decided to have a special day to teach everyone about the things that needed changing in our environment. He wrote letters to all of the colleges and put a special article in Scholastic Magazine to tell them about the special day he had planned. (Most of the schools received this magazine and he knew that the children would help him.)

On April 22, 1970, the first Earth Day was held. People all over the country made promises to help the environment. Everyone got involved and since then, Earth Day has spread all over the planet. People all over the world know that there are problems we need to work on and this is our special day to look at the planet and see what needs changing. Decorating the classroom as a visual reminder of Earth Day and Earth Week.

#### **Grade Level:**

All Grades



Time:

Variable



# Materials Provided:

1. "Happy Earth Day" book for duplication

# **Materials Needed:**

- 1. Crayons
- Paper
   Scissors
- 4. Glue

# Vocabulary:

none

#### Procedure:

- 1. Tell the learners what Earth Day is and how they can be good citizens and help to protect the earth.
- 2. For grades Kindergarten through second, pass out a "Happy Earth Day" activity book and have the learners color the pages.
- 3. Learners in grades third through sixth should be encouraged to create their own Earth Day decorations with art supplies.
- 4. After all the art is completed, decorate the classroom with the learners' new creations.

#### Main Points:

- 1. It is important to remember to protect our planet.
- 2. Remind learners that this week is Earth Week.

### Assessment:

Have learners tell their parent(s) that this week is Earth Week and what projects they are working on to raise awareness about the environment.

### References and Resources:

United States Environmental Protection Agency. (2000). <u>Explores Club</u>. [On-line] Available at: http://www.epa.gov/kids/

United States Environmental Protection Agency. (2000). <u>Happy Earth Day Activity Book</u>. [On-line] Available at: http://www.epa.gov/kids/happyearth.htm

# Optional Enrichment Activity:

Have the learners make an additional decoration to bring home and talk to their families about Earth Day.

# Section IV: Healthy Kids Eat Well

#### Introduction

This section is about eating healthy. Learners will understand which foods are good for their bodies and which foods should only be eaten in small amounts. In addition, they will learn how, why, and when to wash fruits and vegetables.

### **Activities**

"Felt"astic Foods (Pre-Kindergarten to 2<sup>nd</sup> grade)

Pick and Choose (Kindergarten to 2<sup>nd</sup> grade)

Fruit and Veggie Wash (Pre-Kindergarten to Kindergarten)

Be a PAL Coloring Book Activity (Kindergarten to 2<sup>nd</sup> grade)

# "Felt"astic Foods

# Activity Description:

The educator will teach the learners which foods are rich in vitamins and calcium, as well as discuss the difference between foods that are good for us and foods that are not good for us.

# **Educational Objectives:**

At the end of the activity, learners will be able to:

- 1. Identify foods that are good for them.
- 2. Identify foods that are not good for them.
- 3. Explain why the food is good or bad at preventing lead poisoning.

# Assessed Quality Core Curriculum (QCC) Standards:

Health/PE (Grade: K)
Strand: Nutrition
Topic: Foods

**Standard:** Select nutritious foods that contribute to good health.

Health/PE (Grade: K) Strand: Nutrition Topic: Foods

**Standard:** Identify various foods by name.

Health/PE (Grade: 1)

**Strand:** Growth and development

**Topic:** Lifestyle

Standard: Explain that personal health, nutrition, and safety

practices affect growth and development.

Health/PE (Grade: 2) Strand: Nutrition Topic: Nutrients

**Standard:** Recognize that food contains nutrients for energy,

growth, and health.

#### **Grade Level:**

Pre-Kindergarten to 2<sup>nd</sup> grade



Time:

10 minutes



# Materials Provided:

- 1. Felt board
- 2. One felt milk container
- 3. One felt orange
- 4. One felt broccoli
- 5. One felt carrot
- 6. One felt cheese wedge
- 7. One felt French fry
- 8. One felt cookie
- One felt oil and vinegar salad dressing
- 10. Felt letters (enrichment activity)

#### Rationale:

Lead poisoning is one of the most prominent environmental hazards facing children today. Lead gets into children's bodies when they swallow or breathe in dirt, dust, paint chips or fumes containing lead.

Encouraging children to eat right will make them grow strong and healthy. It will also reduce some of the effects of lead exposure. Children who eat enough calcium and iron will absorb less lead into their bodies. Foods rich in calcium include diary products such as milk and cheese and fruits like oranges. Foods high in iron are beans and red meats.

# Vocabulary:

**Fruits:** the edible part of a plant developed from a flower, with any accessory tissues, such as the peach, blueberry, or banana

**Lead:** a heavy metal that is hazardous to health if breathed or swallowed; it is found in old paint, dirt, and dust; a mineral that can be found in old paint, water, soil, and dust. Children can swallow lead or breathe lead-contaminated dust if they play in dust or dirt and put their fingers or hands in their mouth or on objects that they put in their mouth(s); poison that can make you sick

**Vegetables:** any plant whose fruit, seeds, roots, tubers, bulbs, stems, leaves, or flower parts are used as food, such as the bean, beet, potato, onion, asparagus, spinach, or cauliflower

#### Procedure:

One or two learners may complete this activity together. This activity may be done without adult supervision.

- 1. Place all food items in front of the felt board.
- 2. Have learners identify a food that helps their bones grow (e.g., milk, broccoli, cheese, orange, etc.).

# Optional Enrichment Activity:

Use felt letters to spell names of felt foods.

#### Main Points:

- 1. Food helps you grow strong and protects you from harmful things.
- 2. Some healthy foods are fruits and vegetables.



### Assessment:

- 1. Ask the learners to list at least three foods that are good for them (e.g., milk, orange, carrot, cheese, broccoli).
- 2. Ask the learners to list at least three foods that are only good in small amounts (e.g., cookie, French fry, salad dressing).
- 3. Ask the learners to list items that belong in the refrigerator (e.g., milk, orange, cheese) and items that belong in the cupboard (e.g., cookies).

#### References and Resources:

United States Environmental Protection Agency, Office of Pollution Prevention and Toxics, Lead Programs. (2000). <a href="Parents/Teachers/DayCare Providers/PTA Packet">Parents/Teachers/DayCare Providers/PTA Packet</a>. [On-line] Available: <a href="http://www.epa.gov/opptintr/lead.pta.htm">http://www.epa.gov/opptintr/lead.pta.htm</a>

# **Pick and Choose**

# Activity Description:

This activity teaches learners why foods are important. It tells the learners about two sources of healthy foods: fruits and vegetables. Learners are asked to name different fruits and vegetables and complete some worksheets in which they have to recognize fruits and vegetables.

# Educational Objectives:

At the end of the activity, learners will be able to:

- 1. Discuss why it is important to eat healthy foods.
- 2. Name different fruits and vegetables.
- 3. Identify different fruits that are their favorites.

# Assessed Quality Core Curriculum (QCC) Standards:

Health/PE (Grade: K)
Strand: Nutrition
Topic: Foods

**Standard:** Identify various foods by name.

Health/PE (Grade: K)
Strand: Nutrition
Topic: Foods

**Standard:** Select nutritious foods that contribute to good health.

Health/PE (Grade: 1)

Strand: Growth and development

**Topic:** Lifestyle

Standard: Explain that personal health, nutrition, and safety

practices affect growth and development.

Health/PE (Grade: 2) Strand: Nutrition Topic: Nutrients

**Standard:** Recognize that food contains nutrients for energy,

growth, and health.

#### **Grade Level:**

Kindergarten to 2<sup>nd</sup> grade



Time:

20 minutes



# Materials Provided:

- 1. "Pick-a-Fruit" worksheet
- 2. "Pick-a-Veggie" worksheet
- 3. "Fruity Word Search" worksheet
- 4. "Veggie Word Search" worksheet
- 5. "Strong Bones" worksheet

### **Materials Needed:**

1. Pencils or crayons

#### Rationale:

Lead poisoning is one of the most prominent environmental hazards facing children today. Lead gets into children's bodies when they swallow or breathe in dirt, dust, paint chips or fumes containing lead. Encouraging children to eat right will reduce some of the effects of lead. Children who eat enough calcium and iron will absorb less lead into their bodies. Foods rich in calcium include diary products such as milk and cheese and fruits like oranges.

# Vocabulary:

**Fruits:** the edible part of a plant developed from a flower, with any accessory tissues, such as the peach, blueberry, or banana

**Vegetables:** any plant whose fruit, seeds, roots, tubers, bulbs, stems, leaves, or flower parts are used as food, such as the bean, beet, potato, onion, asparagus, spinach, or cauliflower

#### Procedure:

- 1. Tell learners about foods and why foods are important. Ask them what are healthy foods. Tell them food gives their bodies the energy it needs to keep going. Our bodies need food to keep going just like a car needs gas. Foods also give you minerals and vitamins that help you grow big and strong. Eating foods like fruits and vegetables also protect your body from harmful things such as lead.
- 2. Discuss fruits and vegetables as healthy foods.
- 3. Ask learners to name fruits.
- 4. Ask learners to name vegetables.
- 5. Pass out the worksheets and let learners work on them for 15
- 6. Lead a discussion on what their favorite fruits and vegetables are.

#### Main Points:

- 1. Food gives you energy to keep going.
- 2. Food helps you grow and protects you from harmful things.
- 3. Some healthy foods are fruits and vegetables.

# Optional Enrichment Activity:

Ask the learners to make a list of all the fruits and vegetables that they ate that day. They can draw pictures of the fruits and vegetables that they ate.



# Assessment:

- 1. Ask learners why foods are important.
- 2. Ask learners to name different fruits and vegetables.

### References and Resources:

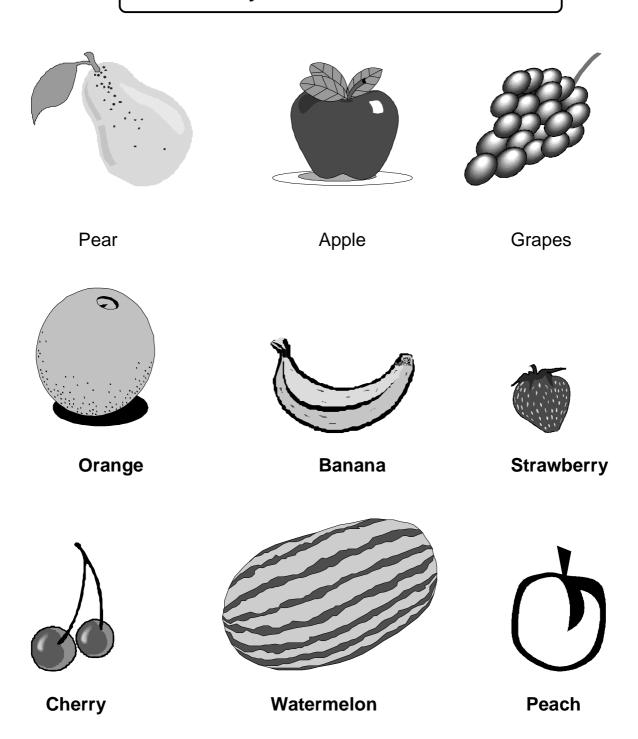
Information Please. (2000). <u>Kid's Almanac</u>. [On-line] Available: http://www.kids.infoplease.com/

United States Environmental Protection Agency, Office of Children's Health Protection. (2000). <u>Food They Eat</u>. [On-line] Available: http://www.epa.gov/children/food.htm

# **PICK-A-FRUIT**

Eating fruits will help you stay healthy and grow big and strong.

# Circle your three favorite fruits.



# **PICK-A-VEGGIE**

Eating vegetables will help you grow big and strong.

Circle your three favorite vegetables.



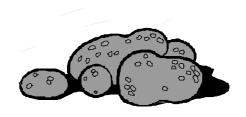




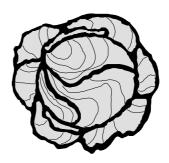
**Green Beans** 

**Broccoli** 

Peas







Cabbage



Carrot



Corn



**Bell Pepper** 

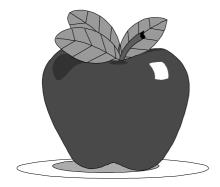
# **FRUITY WORD SEARCH**

Eating fruits will help you stay healthy and grow big and strong.

It's up to you! Find each of the fruity words listed below.

APPLE	LIME
BANANA	MELON
CHERRY	ORANGE
GRAPE	TOMATO

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ı	I	М	E	Α	K	Α	Н
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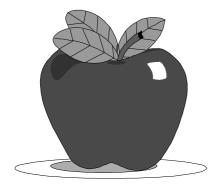
# FRUITY WORD SEARCH ANSWERS

Eating fruits will help you stay healthy and grow big and strong.

It's up to you! Find each of the fruity words listed below.

APPLE	LIME
BANANA	MELON
CHERRY	ORANGE
GRAPE	TOMATO

I	С	Е	Υ	R	С	<u>G</u>	Р
L	<u>O</u>	<u>M</u>	Р	Α	Н	<u>R</u>	<u>C</u>
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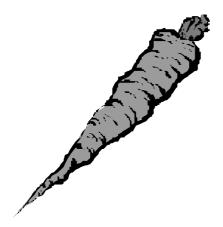
# **VEGGIE WORD SEARCH**

Eating vegetables will help your body stay strong and fight sickness.

It's up to you! Find each of the words listed below.

BEAN	CORN
BROCCOLI	PEAS
CABBAGE	POTATO
CARROT	CELERY

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D	W	С	0	R	Ν	Α	С
S	F	Α	E	V	Ν	В	Α
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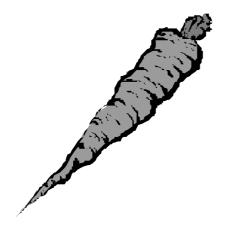
# **VEGGIE WORD SEARCH ANSWERS**

Eating vegetables will help your body stay strong and fight sickness.

It's up to you! Find each of the words listed below.

BEAN	CORN
BROCCOLI	PEAS
CABBAGE	POTATO
CARROT	CELERY

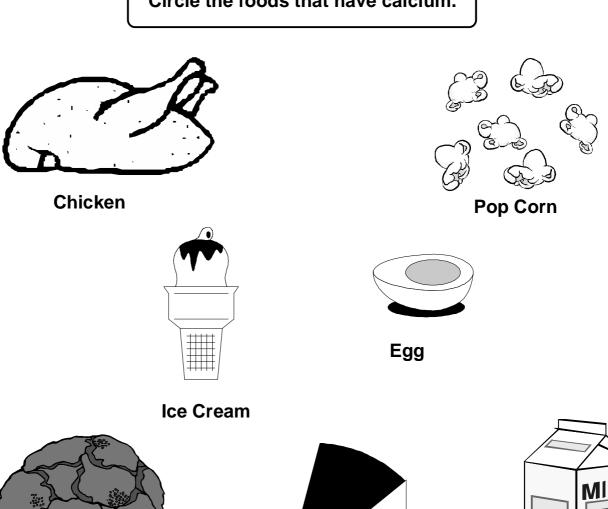
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S	F	Α	<u>E</u>	V	<u>N</u>	B	<u>A</u>
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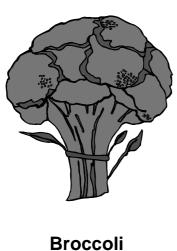


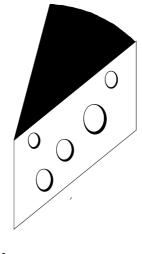
# **STRONG BONES**

Calcium is a mineral that is important for living things like you and me. It helps protect the body against lead and gives you strong bones and teeth. It is found in foods like milk, cheese, cooked greens, and ice cream.

# Circle the foods that have calcium.









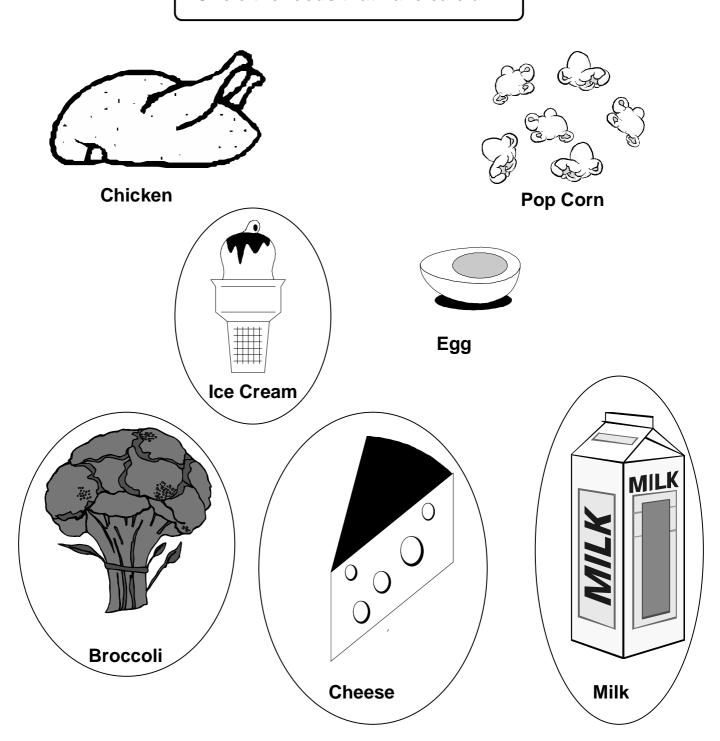
Cheese

Milk

# **STRONG BONES ANSWERS**

Calcium is a mineral that is important for living things like you and me. It helps protect the body against lead and gives you strong bones and teeth. It is found in foods like milk, cheese, cooked greens, and ice cream.

Circle the foods that have calcium.



# Fruit and Veggie Wash

# Activity Description:

The learners will be taught why, how, and when to wash fruits and vegetables.

# **Educational Objectives:**

At the end of the activity, learners will be able to:

- 1. Demonstrate how to wash fruits prior to eating or cooking them.
- 2. Demonstrate how to wash vegetables prior to eating or cooking with them.

# Assessed Quality Core Curriculum (QCC) Standards:

Health/PE (Grade: K) Strand: Personal health

Topic: Germs

Standard: Recognize that germs can cause sickness.

Health/PE (Grade: K)
Strand: Personal health
Topic: Decision making

**Standard:** Describe how personal health decisions can affect self

and others.

#### Rationale:

Pesticides are chemicals designed to control or get rid of "pests" such as insects, rodents, weeds, and bacteria. Examples of common pesticides are roach and insect sprays, chlorine bleach, disinfectants, and flea and tick shampoos for pets. Pesticides may also be found on fruits and vegetables that have not been thoroughly washed. Even though pesticides are beneficial to society, they can be dangerous to people. When used improperly, overused, or improperly stored out of children's reach, pesticides can result in serious health problems, especially for children.

#### **Grade Level:**

Pre-Kindergarten to Kindergarten



Time:

15 minutes



 Plastic fruits and vegetables

### **Materials Needed:**

- 1. Two tubs
- 2. Clean water (no soap or detergent)
- 3. Sponge and/or scrub brush
- 4. Paper towels

# Vocabulary:

**Fruits:** the edible part of a plant developed from a flower, with any accessory tissues, such as the peach, blueberry, or banana

**Pesticides**: chemicals or organic agents used to kill insects, plants, rodents, fungi or microscopic organisms

**Vegetables:** any plant whose fruit, seeds, roots, tubers, bulbs, stems, leaves, or flower parts are used as food, such as the bean, beet, potato, onion, asparagus, spinach, or cauliflower

#### Procedure:

- 1. Fill up the tubs with cool water.
- 2. Dip the sponge and/or scrub brush into the water of the first tub.
- 3. Vigorously wash the fruit and vegetables.
  - a. Break apart vegetables like broccoli and cauliflower before washing.
  - b. Scrub root vegetables like carrots and potatoes.
  - c. Firm fruits like apples and melons can also be scrubbed.
  - d. Leafy vegetables like lettuce and cabbage should have outer leaves pulled off and discarded
- 4. Rinse vegetables in the second tub with clean water.
- 5. Pat the fruits and vegetables dry with a paper towel.

# Main Points:

- 1. Use clean water to wash fruits and vegetables; do not use soap or detergent.
- 2. Wash fruits before eating them.
- 3. Wash vegetables before eating them.



#### Assessment.

- 1. Ask the learners when they should wash fruits and vegetables.
- 2. Ask the learners why they should wash fruits and vegetables.

# Optional Enrichment Activity:

Have learners draw a picture of themselves washing fruits and vegetables.

# References and Resources:

Food Safety (U.S. Department of Agriculture) http://www.foodsafety.gov/

Food Safety: A Team Approach http://vm.cfsan.fda.gov/~lrd/foodteam.html

Food Safety Index (compiled by National Agricultural Library) http://www.nal.usda.gov/fnic/foodborne/fbindex/index.htm

Partnership for Food Safety Education http://www.fightbac.org/

USDA for Kids http://www.usda.gov/news/usdakids/index.html

# Be a PAL Coloring Book Activity

# **Activity Description:**

The learners will use the "PAL Activity Book" to learn key messages about hygiene and healthy eating.

# **Educational Objectives:**

At the end of the activity, the learners will be able to:

- 1. Describe when to wash their hands and toys.
- 2. Describe healthy snacks to others.

# Assessed Quality Core Curriculum (QCC) Standards:

Health/PE (Grade: K)

**Strand:** Disease prevention **Topic:** Hygiene

**Standard:** Demonstrate the proper hand washing technique.

Health/PE (Grade: K)

**Strand:** Nutrition **Topic:** Foods

**Standard:** Identify various foods by name.

Health/PE (Grade: K)

**Strand:** Nutrition **Topic:** Foods

**Standard:** Select nutritious foods that contribute to good health.

Health/PE (Grade: 1) Strand: Nutrition

**Topic:** Food selection

**Standard:** Recognize the reasons people need variety, balance

and moderation in selecting foods.

Health/PE (Grade: 2) Strand: Nutrition Topic: Snacks

Standard: Distinguish between nutritionally sound snacks and

"junk food" (foods of minimal nutritional value).

#### **Grade Level:**

Kindergarten to 2<sup>nd</sup> grade



#### Time:

5-30 minutes (depending on how much of activity book is used)



#### Materials Provided:

1. "PAL Activity Book"

#### **Materials Needed:**

- 1. Pencils
- 2. Crayons

#### Rationale:

Lead poisoning is one of the most prominent environmental hazards facing children today. Lead gets into children's bodies when they swallow or breathe in dirt, dust, paint chips or fumes containing lead. Lead can be in things around the home or school such as paint chips, dust, or dirt on shoes.

Pesticides are chemicals designed to control or get rid of "pests" such as insects, rodents, weeds, and bacteria. Examples of common pesticides are roach and insect sprays, chlorine bleach, disinfectants, and flea and tick shampoos for pets. When used improperly, overused, or improperly stored out of children's reach, pesticides can result in serious health problems, especially for children. Homes, school, and other building use pesticides, which may settle in the air, on carpets, tables, and toys, and on the grass where children play. Bathrooms and kitchens are the rooms most likely to have pesticides not properly stored.

It is important for children to wash their hands after they have played outside and to wash their toys after playing with them. Children should also recognize the importance of eating nutritious foods.

### Vocabulary:

**Fruits:** the edible part of a plant developed from a flower, with any accessory tissues, such as the peach, blueberry, or banana

**Household Products:** includes cleaners, disinfectants, pesticides, paint, paint strippers, wood preservatives, aerosol sprays, insect repellants, air fresheners, stored fuels automotive products and hobby supplies

**Lead:** a heavy metal that is hazardous to health if breathed or swallowed; it is found in old paint, dirt, and dust; a mineral that can be found in old paint, water, soil, and dust. Children can swallow lead or breathe lead-contaminated dust if they play in dust or dirt and put their fingers or hands in their mouth or on objects that they put in their mouth(s); poison that can make you sick

**Pesticides:** chemicals or organic agents used to kill insects, plants, rodents, fungi or microscopic organisms

**Vegetables:** any plant whose fruit, seeds, roots, tubers, bulbs, stems, leaves, or flower parts are used as food, such as the bean, beet, potato, onion, asparagus, spinach, or cauliflower

### Procedure:

Educators should give learners a "PAL Activity Book" and instruct the learners to color the pictures and circle the words in the Word Find.

### Main Points:

- 1. Wash your hands after playing outside.
- 2. Wash your toys after playing with them.
- 3. Eat nutritious snacks.

### Assessment:

Ask the learners to share with others their favorite healthy snacks. Ask learners to tell others when it is important for them to wash their hands.

### References and Resources:

Information Please. (2000). <u>Kid's Almanac</u>. [On-line] Available: http://www.kids.infoplease.com/

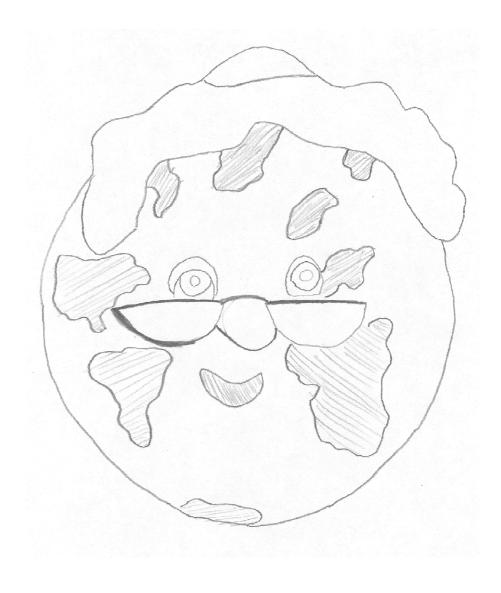
National Lead Information Center Hotline, (800) 424-LEAD.

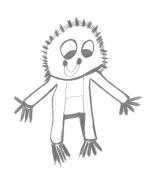
United States Environmental Protection Agency, Office of Children's Health Protection. (2000). <u>Food They Eat</u>. [On-line] Available: http://www.epa.gov/children/food.htm

### Optional Enrichment Activity:

Have learners draw pictures of their favorite snacks and favorite toys.

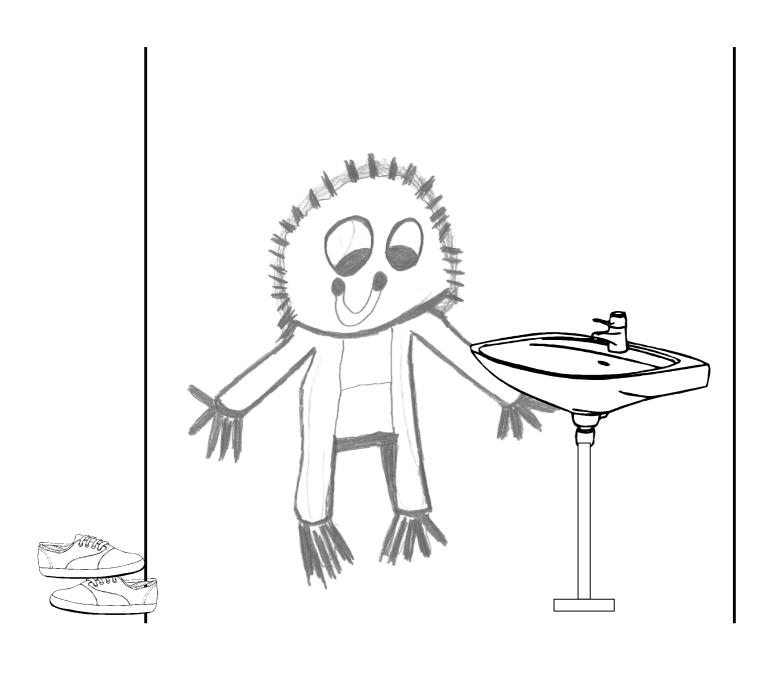
# PAL's



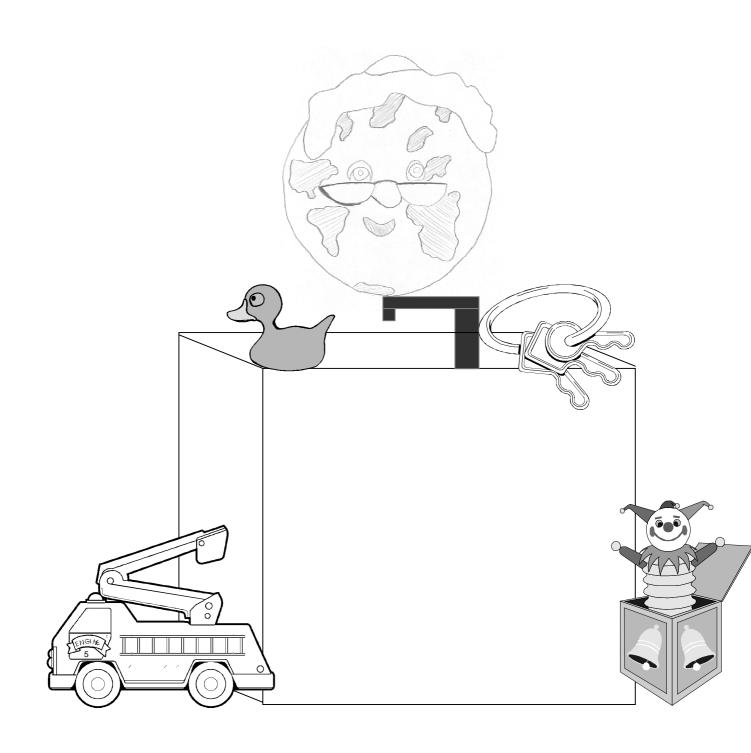


**Activity Book** 





Playing outside is fun, but don't forget to wash your hands when you are done! And remember to leave your shoes outside.



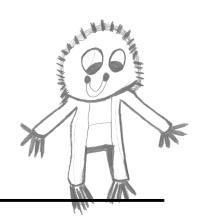
PAL says, "remember to wash your plastic toys after playing with them."



Fruits and vegetables make tasty, healthy snacks!

### Word Find

### Find and circle these words:

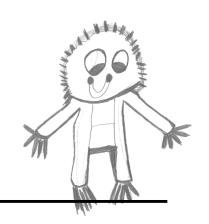


LEAD POISON SHOES PESTICIDE CLEAN WASHING PAL DIRT SAFE HEALTH CHILDREN TOYBATH

POISONFQULPR EXMANWSHOESL SFRFPALEYYDE TPLECSYAPGVE IULZCHILDREN CLEANIQTIKFS IRAAINOHRBBX DQDXLGYTTFDI ETOYBATHREOA

### **Word Find Answers**

Find and circle these words:



LEAD POISON SHOES PESTICIDE CLEAN WASHING PAL DIRT SAFE HEALTH CHILDREN TOYBATH

POISONFQULPR ENNWSHOEN SHOPGVE SHOPGVE

### **Section V: Healthy Kids Keep Clean**

### Introduction

This section is about keeping children and their toys clean. Activities include a song, story, and puppet video that will reinforce hand washing. In addition, the learners will understand how and when to wash their toys.

### **Activities**

A Toy Bath (Pre-Kindergarten to 1<sup>st</sup> grade)

Keeping Me Clean (Pre-Kindergarten to 1st grade)

A Day in the Life of PAL (Pre-Kindergarten to Kindergarten)

A Day in the Life of PAL: Lesson 2 (1st to 2nd grade)

Wash, Wash, Wash Your Hands (Pre-Kindergarten-Kindergarten)

Three PALS for Kids Puppet Video (Kindergarten to 1<sup>st</sup> grade)

PAL Says (Pre-Kindergarten to 2nd grade)

Be a PAL Coloring Book Activity (Kindergarten to 2<sup>nd</sup> grade)

### A Toy Bath

### Activity Description:

The educator will teach the learners how to wash their plastic toys correctly – using a wet wash, by demonstrating the technique.

### Educational Objectives:

At the end of the activity, learners will be able to:

- 1. Properly wash one toy.
- 2. Identify two reasons why it is important to wash their toys.

### Assessed Quality Core Curriculum (QCC) Standards:

Health/PE (Grade: K) Strand: Personal health

**Topic:** Hygiene

**Standard:** Recognize the importance of basic personal hygiene habits required maintaining health and preventing illness or

disease.

Health/PE (Grade: 1) Strand: Personal health

Topic: Germs

**Standard:** Recognize that there are different kinds of germs that

cause different sicknesses.

#### Rationale:

Toys can get dirty and germs on toys can cause children to get sick. In addition, lead poisoning is one of the most prominent environmental hazards facing children today. Lead gets into children's bodies when they swallow or breathe in dirt, dust, paint chips or fumes containing lead. Lead can be in things around the home or school such as paint chips, dust, or dirt on shoes. A major source of lead poisoning is lead-based paint. When painted surfaces become old or degrade, dust or paint chips that fall off onto to windowsills, floors, or outdoors may contain lead. Paint dust or chips can stick to toys, fingers, and other objects that children will put into their mouths. Therefore, it is important to

#### **Grade Level:**

Pre-Kindergarten to 1st grade



Time:

10 minutes



### Materials Provided:

- 1. Plastic toys
- 2. "Toy Washing Maze" worksheet

### **Materials Needed:**

- 1. Two plastic tubs
- 2. Clean water
- 3. Sponge
- 4. Child safe handwashing liquid

- 5. Gloves (optional)6. Paper towels7. Pencil (enrichment) activity)

encourage kids and parents to wash toys that lie on the floor where it may come into contact with germs and lead.

### Vocabulary:

**Germ:** small living things that you cannot see without a microscope that can make you sick

**Lead:** a heavy metal that is hazardous to health if breathed or swallowed; it is found in old paint, dirt, and dust; a mineral that can be found in old paint, water, soil, and dust. Children can swallow lead or breathe lead-contaminated dust if they play in dust or dirt and put their fingers or hands in their mouth or on objects that they put in their mouth(s); poison that can make you sick

#### Procedure:

Tell the learners that we all love to play with our toys. So, we don't want anything on them that would make them dirty and unsafe to play with. These things could be germs, dirt, or lead. So, to keep them clean, all we have to do is give them a bath. It's fun to give our toys a bath in order to keep the germs, dirt, and lead off of them.

Two learners can complete this activity together. This activity requires supervision. It is essential that the learners dry their hands before they move on to the next activity.

- 1. Fill up the 2 plastic tubs with warm water.
- 2. Put on your gloves (optional).
- 3. Have the educator add a little bit of child-safe hand-washing liquid into *one* of the tubs.
- 4. Mix hand-washing liquid in water so that it has suds.
- 5. Dip the sponge in the soapy water.
- 6. Rub the wet sponge on your toys to wash them.
- 7. Rinse them off in clean water (2<sup>nd</sup> tub).
- 8. Pat them dry with a paper towel.
- 9. Tell the learners that their toys are clean and ready to play with some more.
- 10. Wipe floor after each group to ensure that the next group does not slip on spilled water.

### Optional Enrichment Activity:

Distribute the "Toy Washing Maze" worksheet. Have the learners see if they can lead their toys through the maze into the bathtub.

### Main Points:

- 1. It is important to keep toys clean.
- 2. Wash toys with soapy water and rinse with clean water.



### Assessment:

- 1. Ask the learners to identify three of the steps necessary to wash their toys properly.
- 2. Ask the learners to list two reasons why it is important to wash their toys.

### References and Resources:

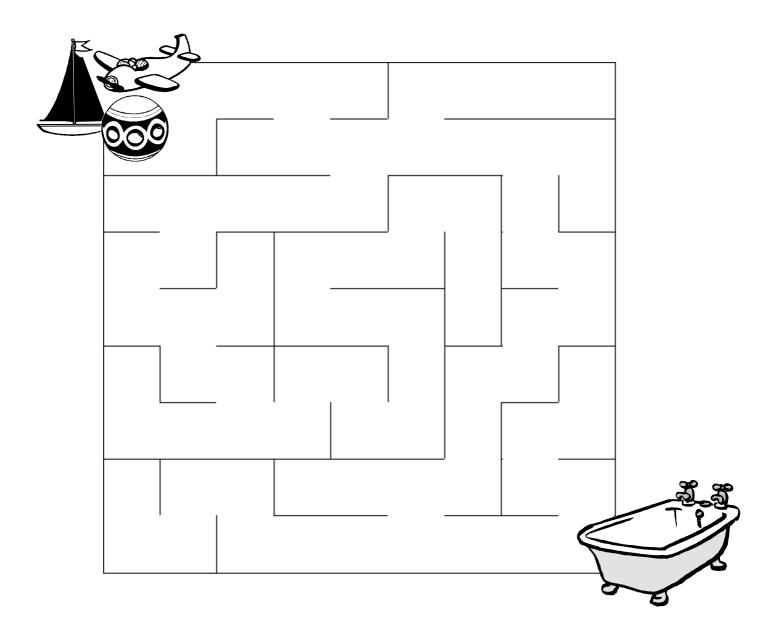
National Lead Information Center Hotline, (800) 424-LEAD.

United States Environmental Protection Agency, Office of Pesticide Programs. (2000). Why Children May Be Especially Sensitive to Pesticides. [On-line] Available:

http://www.epa.gov/pesticides/food/pest.htm

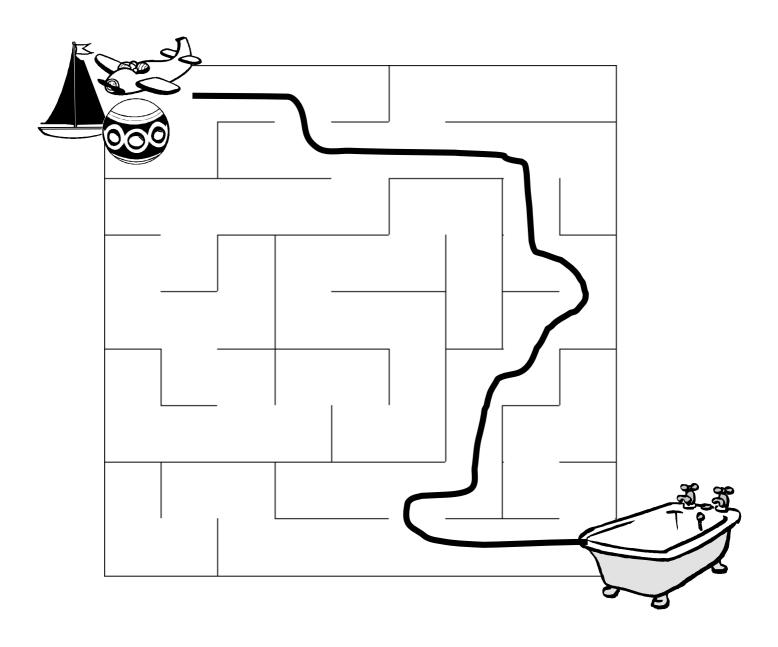
### **Toy Washing Maze**

Put the toys in the bathtub and wash them.



### **Toy Washing Maze Answers**

Put the toys in the bathtub and wash them.



### **Keeping Me Clean**

### Activity Description:

The educator will teach the learners to take off their shoes and wash their hands after playing outside.

### Educational Objectives:

At the end of this activity, learners will be able to:

- 1. List two reasons why it is important to take off their shoes and wash their hand when entering the house after being outside.
- 2. Demonstrate proper hand washing technique.

### Assessed Quality Core Curriculum (QCC) Standards:

Health/PE (Grade: K) Strand: Personal health

Topic: Hygiene

**Standard:** Recognize the importance of basic personal hygiene habits required to maintain health and prevent illness or disease.

Health/PE (Grade: 1) Strand: Personal health

**Topic:** Germs

**Standard:** Recognize that there are different kinds of germs that

cause different sicknesses.

#### Rationale:

Lead poisoning is one of the most prominent environmental hazards facing children today. Lead gets into children's bodies when they swallow or breathe in dirt, dust, paint chips or fumes containing lead. Lead can be in things around the home or school such as paint chips, dust, or dirt on shoes. A major source of lead poisoning is lead-based paint. When painted surfaces become old or degrade, dust or paint chips that fall off onto to windowsills, floors, or outdoors may contain lead. Paint dust or chips can stick to the bottoms of shoes. If shoes are worn in the house, the dirt or dust, which may contain lead or other germs, may be tracked throughout the house spreading the risk of exposure. Therefore, it

#### **Grade Level:**

Pre-Kindergarten to 1st grade



Time:

10 minutes



### Materials Provided:

"Hand Washing Maze" worksheet

### **Materials Needed:**

- 1. Play-time ball (or other toy)
- 2. Tub
- 3. Child-safe handwashing liquid soap
- 4. Water (in jugs)
- 5. Paper towels6. Pencil (enrichment activity)

is important to encourage kids to take of their shoes and to wash their hands after playing outside.

### Vocabulary:

**Germ:** small living things that you cannot see without a microscope that can make you sick

**Lead:** a heavy metal that is hazardous to health if breathed or swallowed; it is found in old paint, dirt, and dust; a mineral that can be found in old paint, water, soil, and dust. Children can swallow lead or breathe lead-contaminated dust if they play in dust or dirt and put their fingers or hands in their mouth or on objects that they put in their mouth(s); poison that can make you sick

**Pesticides:** chemicals or organic agents used to kill insects, plants, rodents, fungi or microscopic organisms

### Procedure:

Tell the learners when they play outside there are a lot of germs and dirt that get on their hands and shoes. They don't want these things in their houses, so as soon as we come in from playing outside they take shoes off and then wash. Tell them they are going to learn a rhyme.

A maximum of five learners can participate in this activity together. This activity requires supervision.

- 1. Ask learners to pretend to be outside and let learners play for a few minutes with play-time ball (or other toy).
- 2. Have educator the say, "Time to come inside."
- 3. Have learners recite the rhyme:

It's fun to play outside where it's green!
But when I come in I want to be clean!
Take my shoes off, then wash the germs away,
It' fun to stay healthy and have more time to play!

- 4. Have learners take their shoes off.
- 5. Now have learners wash their hands.
  - a. Learners should vigorously rub hands together using soap.
  - b. Learners should rinse hands with clean water from the jugs.
- 6. Pat learner's hand dry with a paper towel.

### Optional Enrichment Activity:

For 1st graders:
Distribute the "Hand
Washing Maze"
worksheet and have the
learners help lead the
others to the bar of soap.

7. Wipe floor after each group to ensure that the next group does not slip on spilled water.

Remind the learners that they should always remember to take off their shoes and wash their hands when they come in from playing outside. This will cut down the germs, dirt, and lead in your house.

#### Main Points:

Wash your hands to get rid of lead and germs before you eat, after playing outside, or after playing with a pet.



### Assessment:

- 1. Ask the learners to list two reasons why it is important to take of their shoes and wash their hands after playing outside.
- 2. Ask the learners to demonstrate the skills taught.

### References and Resources:

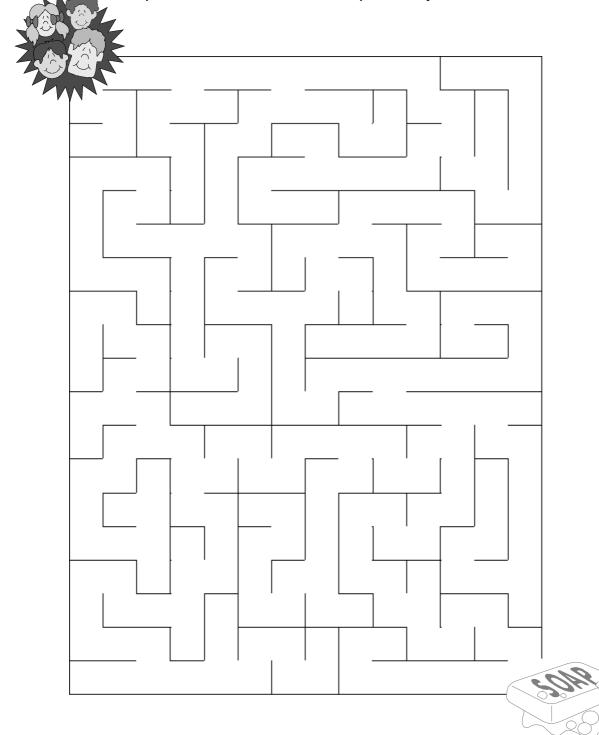
Information Please. (2000). <u>Kid's Almanac</u>. [On-line] Available: http://www.kids.infoplease.com

National Lead Information Center Hotline, (800) 424-LEAD

United States Environmental Protection Agency, Office of Pesticide Programs. (2000). Why Children May Be Especially Sensitive to Pesticides. [On-line] Available at http://www.epa.gov/pesticides/food/pest.htm

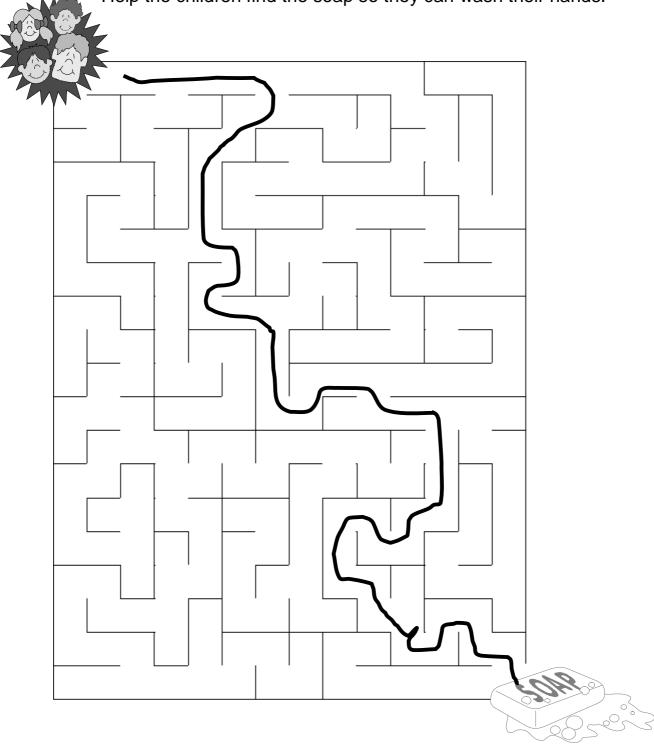
### **Hand Washing Maze**

Help the children find the soap so they can wash their hands.



### **Hand Washing Maze Answers**

Help the children find the soap so they can wash their hands.



### A Day in the Life of PAL

### Activity Description:

The learners will use the attached story "A Day in the Life of PAL" to identify times when they should wash their hands.

### **Educational Objectives:**

At the end of this activity, learners will be able to:

- 1. Identify when to wash their hands.
- 2. Understand why they need to wash their hands.

### Assessed Quality Core Curriculum (QCC) Standards:

Language Arts (Grades: K, 1) Strand: Oral communication Topic: Listening/speaking

Standard: Listen to a variety of literary forms, including stories and

poems.

Health/PE (Grade: K) Strand: Personal health

Topic: Hygiene

**Standard:** Recognize the importance of basic personal hygiene habits required to maintain health and prevent illness or disease (i.e. proper hand washing and caring for teeth, gums, eyes, ears,

nose, skin, hair and nails).

Health/PE (Grade: K)
Strand: Personal health

Topic: Germs

**Standard:** Recognize that germs can cause sickness.

Health/PE (Grade: K) Strand: Personal health Topic: Decision-making

Standard: Describe how personal health decisions can affect self

and others.

#### **Grade Level:**

Pre-Kindergarten to Kindergarten



Time:

20 minutes



Materials Provided:

1. "A Day in the Life of PAL" story

### Materials Needed for Enrichment Activity:

- 1. Paper
- 2. Crayons

#### Rationale:

Lead poisoning is one of the environmental hazards facing children today. Lead gets into children's bodies when they swallow or breathe in dirt, dust, paint chips or fumes containing lead. It is hard to recognize signs of lead poisoning because a person cannot see, taste, or smell lead. Hand washing is one way of protecting children against lead. Hand washing also protects children from other germs.

### Vocabulary:

**Germ:** small living things that you cannot see without a microscope that can make you sick

**Lead**: a heavy metal that is hazardous to health if breathed or swallowed; it is found in old paint, dirt, and dust; a mineral that can be found in old paint, water, soil, and dust. Children can swallow lead or breathe lead-contaminated dust if they play in dust or dirt and put their fingers or hands in their mouth or on objects that they put in their mouth(s); poison that can make you sick

### **Procedure:**

- 1. Have the learners sit in a circle with the educator.
- 2. Tell the learners that they are going to hear a story about hand washing.
- 3. Read the story "A Day in the Life of PAL" to the learners. At the appropriate times, prompt the learners to identify when PAL should wash his hands.
- 4. Recap with a review of times when learners should wash their hands.

### Main Points:

Wash your hands to get rid of lead and germs before you eat, after playing outside, or after playing with a pet.

### Optional Enrichment Activity:

- Have learners draw a picture of PAL washing his hands.
- 2. Have learners tell their own hand-washing story about PAL.



### Assessment:

Discuss with the learner's times when they should wash their hands. Make sure that learners wash their hands at appropriate times throughout the day.

### References and Resources:

National Lead Information Center Hotline, (800) 424-LEAD

### A Day in the Life of PAL: A Hand Washing Story

... bbrrriiing ... bbrrriiing ... bbrrriiing.

It is 7 o'clock in the morning, and PAL's alarm clock is ringing. Is it time to get up already? PAL can smell pancakes cooking in the kitchen so he gets out of bed and opens the closet. PAL puts on his favorite outfit: red pants and a blue shirt. He then goes to the bathroom and brushes his hair.

Running downstairs, PAL calls to his mother, "Mommy, I'm so hungry I could eat a lion!" PAL's mother greets him in the kitchen, "here's your breakfast" – and she places a plate full of pancakes with strawberry syrup in front of PAL. PAL gobbles them down and drinks a big glass of orange juice.

**EDUCATOR:** Boys and girls, what did PAL forget to do before he ate his pancakes? (Prompt learners: wash his hands).

After breakfast, PAL goes back to his room to brush his teeth and wash up. PAL kisses his mother goodbye and goes to the bus stop to wait for his school bus. When he gets to school, PAL goes to his class and learns many things – spelling, math, and reading.

At lunchtime, PAL gets the lunch that his mother packed. Before he eats, he remembers to ...

**EDUCATOR**: Boys and girls, what does PAL need to do before he eats his lunch? (Prompt learners: wash his hands)

After lunch PAL and his friends play on the playground. PAL and his best friend George play with a pile of rocks. They also tease Susie and Jane.

**EDUCATOR:** Boys and girls, before PAL, George, Susie, and Jane can go back to their classroom, what do they need to do? (Prompt learners: wash their hands).

After recess, PAL's class learns geography. Finally 2:30 pm comes and the bell rings ... time to go home. When he gets home, PAL plays with Spot, the neighbor's dog. At 5 o'clock, PAL's mother calls him to supper. Before he eats, what does PAL do?

**EDUCATOR:** Boys and girls, what does PAL need to do after playing with Spot and before he eats supper? (Prompt learners: wash his hands)

After supper, PAL does his math problems and reading – and takes a bath. When he gets into bed, he is very tired. "What a fun day – I can't wait until tomorrow," he thinks.

### A Day in the Life of PAL: Lesson 2

### Activity Description:

The learners will write their own story describing PAL's day.

### **Educational Objectives:**

At the end of this activity, the learner will be able to:

1. Identify when to wash his or her hands.

### Assessed Quality Core Curriculum (QCC) Standards:

Health/PE (Grade: 1)
Strand: Personal health

Topic: Germs

**Standard:** Recognize that there are different kinds of germs that

cause different sicknesses.

Health/PE (Grade: 1)
Strand: Personal health

**Topic:** Communicable diseases

**Standard:** Describe how some sicknesses are passed from one

person to another.

Health/PE (Grade: 2) Strand: Personal health

**Topic:** Communicable diseases

**Standard:** State and demonstrate health practices that prevent the

spread of disease.

Language Arts (Grades: 1, 2) Strand: Written communication

**Topic**: Writing

**Standard:** Write a minimum of three sentences about a topic.

Language Arts (Grades: 1, 2) Strand: Written communication

**Topic:** Writing

**Standard:** Communicate ideas by using the writing process.

### **Grade Level:**

1<sup>st</sup> to 2<sup>nd</sup> grade



Time:

30 minutes



Materials Provided:

1. "A Day in the Life of PAL" worksheet

#### **Materials Needed:**

- 1. Pencils
- 2. Crayons (enrichment activity)

#### Rationale:

Lead poisoning is one of the environmental hazards facing children today. Lead gets into children's bodies when they swallow or breathe in dirt, dust, paint chips or fumes containing lead. It is hard to recognize signs of lead poisoning because a person cannot see, taste, or smell lead. Hand washing is one way of protecting children against lead and the spread of germs.

### Vocabulary:

**Germ:** small living things that you cannot see without a microscope that can make you sick

**Lead:** a heavy metal that is hazardous to health if breathed or swallowed; it is found in old paint, dirt, and dust; a mineral that can be found in old paint, water, soil, and dust. Children can swallow lead or breathe lead-contaminated dust if they play in dust or dirt and put their fingers or hands in their mouth or on objects that they put in their mouth(s); poison that can make you sick

### **Procedure:**

- 1. Give each learner a blank "A Day in the Life of PAL" worksheet.
- 2. Tell the learners that they are going to write a story about PAL describing the different activities he does and when he washes his hands. You may prompt the learners to think about such as eating, playing, and going to school.
- 3. Give the learners 15-20 minutes to write their stories.
- 4. Ask for volunteers to read the stories to the rest of the class.
- 5. As the learners share their stories, where appropriate, prompt the learners to think about hand washing.
- 6. Recap with a review of times when learners should wash their hands.

### Main Points:

Wash your hands to get rid of lead and germs before you eat, after playing outside, or after playing with a pet.

## Optional Enrichment Activity:

Have learners draw pictures of PAL washing his hands.



### Assessment:

Discuss with the learners times when they should wash their hands. Make sure that learners wash their hands at appropriate times during the day.

### References and Resources:

National Lead Information Center Hotline, (800) 424-LEAD.

A Day in the Life of PAL		
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### Wash, Wash, Wash Your Hands

### Activity Description:

Learners will sing a song that describes the importance of hand washing.

### **Educational Objectives:**

At the end of this activity, learners will be able to:

- 1. Describe why cleanliness is important to health.
- 2. Explain the importance of being in charge of their bodies.

### Assessed Quality Core Curriculum (QCC) Standards:

Health/PE (Grade: K) Strand: Personal health

Topic: Hygiene

**Standard:** Recognize the importance of basic personal hygiene habits required to maintain health and prevent illness or disease (i.e. proper hand washing and caring for teeth, gums, eyes, ears, nose, skin, hair and nails).

Health/PE (Grade: K)
Strand: Personal health

**Topic:** Germs

**Standard**: Recognize that germs can cause sickness.

Health/PE (Grade: K)
Strand: Personal health
Topic: Decision-making

Standard: Describe how personal health decisions can affect self

and others.

#### Rationale:

Lead poisoning is one of the environmental hazards facing children today. Lead gets into children's bodies when they swallow or breathe in dirt, dust, paint chips or fumes containing lead. It is hard to recognize signs of lead poisoning because a person cannot see, taste, or smell lead. Lead and other germs can make children sick.

#### **Grade Level:**

Pre-Kindergarten to Kindergarten



Time:

15 minutes



### Materials Provided:

- Cassette tape with song
- 2. Song board with lyrics
- 3. Song script

### **Materials Needed:**

1. Cassette player

Hand washing is the best way for children to avoid lead and other germs than can spread illness or disease.

### Vocabulary:

**Germ:** small living things that you cannot see without a microscope that can make you sick

**Lead:** a heavy metal that is hazardous to health if breathed or swallowed; it is found in old paint, dirt, and dust; a mineral that can be found in old paint, water, soil, and dust. Children can swallow lead or breathe lead-contaminated dust if they play in dust or dirt and put their fingers or hands in their mouth or on objects that they put in their mouth(s); poison that can make you sick

### Procedure:

- 1. Have the learners form a circle with the educator.
- 2. Tell the learners that germs and lead are on many things. They are so small that children cannot see them. They can make you sick if you eat, touch, or swallow them. Children can get rid of germs and lead by washing their hands.
- 3. Tell the learners that they are going to hear a song about hand washing and then everyone will sing it together.
- 4. Play the song on the tape. As the song is sung, point to the words on the song board.
- 5. After playing the song, let the learners sing along with the tape.
- 6. Recap with a review of why it is important to wash their hands and times when they should wash their hands.

### Main Point:

Wash your hands to get rid of lead and germs before you eat, after playing outside, or after playing with a pet.



### Assessment:

- 1. Discuss with the learners that wash washing is important to their health and to take care of their bodies.
- 2. Ask the learners at what times should they wash their hands.

### Optional Enrichment Activity:

Have learners make up their own verse to the song.

### References and Resources:

National Lead Information Center Hotline, (800) 424-LEAD.

### Wash, Wash, Wash Your Hands Tune: Row, Row, Row Your Boat



Wash, wash,
Wash your hands
Each and every one
Under nails and back and front
Washing can be fun!

Wash, wash,
Wash your hands
Especially after play
With your pets or in the yard
Wash them through the day!

Wash, wash,
Wash your hands
Using lots of suds
Rinse them off and dry them up
Washing takes off mud.

Wash, wash,
Wash your hands
Before you have a snack
Use the soap and rinse them well
Wash to stay on a healthy track.

Wash, Wash, Wash your hands, Make it nice and quick, Washing keeps the germs away, Germs can make you sick!

Wash, wash,
Wash your hands
Each and every one
Under nails and back and front
Washing can be fun!



### **Taped Song Introductory Script**

"Hello boys and girls,

Lots of people work really hard at helping to keep kids safe and healthy like Moms and dads, grandmas and granddads, doctors and nurses, teachers, firemen, and policemen.

But you know what?

There are some really important things that YOU can do to stay healthy and safe too.

You can stay away from all poisons. Never play with them or put them in your mouth or touch them.

You can run away from tobacco smoke. In a car you can open the windows to make sure there is a way for the smoke to get away from you.

But most of all, you can wash your hands! That sounds easy, right?

Washing your hands protects you from germs and other bad things like lead that can make you sick.

So washing your hands is a VERY important thing that you can do to take good care of yourself.

Help your friends and brothers and sisters wash their hands too.

We always wash our hands before we eat anything.

We always wash our hands after playing outside.

We always wash our hands after playing with a pet.

In fact we wash our hands all through the day.

I have a little song to teach you that you can sing while you wash your hands. It is to the tune of 'Row, Row, Row Your Boat'. Please sing along.

Here we go..."

### **Three PALS for Kids Puppet Video**

### Activity Description:

The learners will watch a video production of a play with the three PAL puppet characters. The play will highlight hand washing, poison prevention and reducing cigarette smoke inhalation. The learners will then put on a puppet show of their own highlighting what they learned from the PALS.

[Note: This video includes the hand washing song from "Wash, Wash, Wash, Your Hands" activity. Educators may want to complete the "Wash, Wash, Wash, Your Hands" activity prior to viewing the video.]

### Educational Objectives:

At the end of this activity, learners will be able to:

- 1. Describe when they should wash their hands.
- 2. Discuss why is important to not touch harmful chemicals.
- 3. State how smoke is harmful and how to avoid inhaling cigarette smoke.

### Assessed Quality Core Curriculum (QCC) Standards:

Health/Physical Education (Grade: K) Strand: Alcohol, tobacco and other drugs

**Topic:** Poison (safety rules)

**Standard:** Practice safe behaviors when finding unknown or dangerous substances or objects (i.e. medicines, unmarked

containers)

Health/Physical Education (Grade: K)

**Strand:** Disease prevention

Topic: Hygiene

**Standard:** Demonstrate the proper hand washing technique.

**Health/Physical Education (Grade: K)** 

**Strand:** Nutrition **Topic:** Foods

**Standard:** Select nutritious foods that contribute to good health.

Health/Physical Education (Grade: 1) Strand: Alcohol, tobacco and other drugs

**Topic:** Effects

Standard: Recognize that alcohol and tobacco products are drugs

that harm the body in many ways.

#### Grade Level:

Kindergarten to 1<sup>st</sup> grade



Time:

20 minutes



### Materials Provided:

- 1. Character puppets
- 2. Puppet stage
- 3. Cassette tape with song
- 4. Song board with lyrics
- 5. "Wash, Wash, Wash Your Hands" lyrics (enrichment activity)

#### Materials Needed:

- 1. VCR
- 2. Cassette player

**Health/Physical Education (Grade: 1)** 

Strand: Personal health

Topic: Germs

Standard: Recognize that there are different kinds of germs that

cause different sicknesses.

### Rationale:

Children are particularly at risk to the harmful health effects of environmental hazards because their bodies are not fully developed and they are often unable to identify a harmful substance. It is important to teach children to avoid inhaling cigarette smoke and to stay away from chemicals and poisons. Also, because children are constantly curious and exploring things through touch, teaching them to wash their hands after certain activities will prevent disease and lead poisoning, and promote good hygiene.

### Vocabulary:

**Chemical**: substances characterized by molecular composition used in factories, farms, and homes for a variety of purposes such as cleaning, tanning, killing pests, and helping to maintain vehicles

**Household Products**: includes cleaners, disinfectants, pesticides, paint, paint strippers, wood preservatives, aerosol sprays, insect repellants, air fresheners, stored fuels automotive products and hobby supplies

**Lead:** a heavy metal that is hazardous to health if breathed or swallowed; it is found in old paint, dirt, and dust; a mineral that can be found in old paint, water, soil, and dust. Children can swallow lead or breathe lead-contaminated dust if they play in dust or dirt and put their fingers or hands in their mouth or on objects that they put in their mouth(s); poison that can make you sick

**Poisons:** chemicals that can make you sick if breathed, swallowed, or touched (with an inherent property); (that) tend(s) to destroy life or impair health

**Secondhand Tobacco Smoke:** a mixture of smoke given off by the burning end of a cigarette, pipe or cigar and the smoke exhaled from the lungs of a smoker

### Procedure:

- 1. Play the PAL video for the learners.
- 2. Ask learners if they remember the safety messages from the play.
- Ask for volunteers to perform their own play, using the character puppets and puppet stage, highlighting what they learned from the PALS.

#### Main Points:

- 1. The importance of and when to wash your hands.
- 2. Not to play with or touch chemicals and poisons.
- 3. The harmful effects of inhaling cigarette smoke.



### Assessment:

After the play is finished ask the learners:

- To identify when they need to wash their hands (e.g., after petting a dog, after going to the bathroom, before eating a snack) and when they don't (e.g., after reading a book or watching a movie).
- 2. What would they do if they were standing next to a person that was smoking a cigarette?
- 3. What should they do if they find bug spray under the kitchen sink?

### References and Resources:

Information Please. (2000). <u>Kid's Almanac</u>. [On-line] Available: http://www.kids.infoplease.com

National Lead Information Center Hotline, (800) 424-LEAD

United States Environmental Protection Agency, Office of Pesticide Programs. (2000). Why Children May Be Especially Sensitive to Pesticides. [On-line] Available:

http://www.epa.gov/pesticides/food/pest.htm

### Optional Enrichment Activity:

- 1. With their parents, the learners walk around their house and identify substances that they should "run away from."
- Distribute a copy of the hand washing song lyrics to "Wash, Wash, Wash Your Hands" so they can learn the song with their family to sing before meals.

# Three PALS for Kids – Puppet Show Script –

Written by Jane Trowbridge, RN, MPH, CHES

(1=PAL Guy; 2=PAL Dog; 3=PAL World)

Curtain opens with the three PALS at different places on the stage. looking around. PAL Guy come up stage to address the audience, the others take notice of him and come a bit closer.

PAL Guy	Hi. My name is PAL. Do you know what? [pause] I want to help kids stay healthy by washing their hands throughout the day.
PAL Dog	Wait a minute! My name is PAL and I want to keep kids safe by teaching them to stay away from chemicals and poisons.
PAL World	[In a blustering way, barging in on them] No way! My name is PAL and I want to protect kids from all the things that can harm them. So you two can just move along and I will do all the work. Hmmmm [thinking it over]
	Of course, there is a lot to do and I could use some help. Hey, I have an idea- why don't we act like real PALS and work together? [Turning toward the audience] What do you think boys and girls, isn't it a good idea to have three PALS instead of one?
PAL Guy	Hey, I like <b>that idea</b> ! And as I said before, I want to <b>teach</b> the boys and girls about washing their hands. I have a <b>song</b> about what I like to do best- wash my hands <b>before I eat</b> , after I <b>come in from playing outside</b> , or <b>after playing with my pets.</b>
PAL Dog	I know that song. Can I sing too?

PAL Guy Sure! Why don't **we all sing** it together? [Turning to the audience]

Please join in and sing with us. [Clearing the throat.] Let's tune up... mi, mi, mi! Here we go. [Play tape or sing song all together.] That was **great**!

PAL World After all that **work** I am getting **hungry** for some food that makes my body **stronger**.

PAL Dog I just happen to have a few yummy **snacks** right here to munch on.

PAL Guv [Pushing in to see what is there] Can I see what you have? Oh goodie! PAL has some cold milk, some cheese, and some greens. These snacks help my body stay strong and beautiful!!! Let's eat! Gobble gobble gobble! PAL World [Rocking back and forth to show satisfaction with the food] I feel **sooo** much better now. PAL Dog Ok. Ok. Now I want to tell the kids something. My big thing is to make sure kids stay away from chemicals and poisons, things like cleaners and bug and garden sprays that Mom and Dad use around the house. They are really yucky and can really make kids sick and have to go to the hospital. Never, never, play with these things, and **never** put them in your mouth or on your skin. OK? PAL Guy Wow! PALS, we each know so many things to help keep healthy and safe, But isn't there something that we forgot? [thinking] PAL World You're right. I will **whisper** it to you both. [BUZZ, BUZZ, BUZZ] whispers] Ready? (All 3 PALS) [All hunch together to hear the whispers, count to 3 and then turn to the audience 1 (All 3 PALS) [Use a louder voice] STAY AWAY FROM CIGARETTE SMOKE!!!! Yeah, we did it. PAL Guy **Tobacco smoke** can really make kids cough and get **sick**. Keep it away from you! PAL Dog Ok girls and boys, we have told you **sooooo many things** today. Do you think you can remember them all? PAL Guy Well, before we say good bye, **who** can tell me one thing we told you about? I will give you a hint, it is **MY favorite thing** to do. [Listen for washing hands.] That's right, wash your hands. PAL World What **else** can you remember? [Listen for stay away from poisons, stay away from smoke.] That's right boys and girls, stay away from poisons and run away from smoke. PAL Dog That is **great**, girls and boys. You have done a **terrific job** as an audience. Please do one last thing for us. Please tell your friends about how **important** it is to...

Wash your hands before you eat or after playing outside.

PAL Guy

PAL Dog Stay away from cleaners, sprays and poisons, and ...

PAL World Run away from tobacco smoke.

PAL Guy We are your **PALS** and we will **keep working** to help keep your

environment or everything around you safe so you will be healthy

and happy. Good bye now!

PAL World Good bye and thank you for watching our show!

PAL Dog Good bye!

The End

# Wash, Wash, Wash Your Hands Tune: Row, Row, Row Your Boat



Wash, wash,
Wash your hands
Each and every one
Under nails and back and front
Washing can be fun!

Wash, wash,
Wash your hands
Especially after play
With your pets or in the yard
Wash them through the day!

Wash, wash,
Wash your hands
Using lots of suds
Rinse them off and dry them up
Washing takes off mud.

Wash, wash,
Wash your hands
Before you have a snack
Use the soap and rinse them well
Wash to stay on a healthy track.

Wash, Wash, Wash your hands, Make it nice and quick, Washing keeps the germs away, Germs can make you sick!

Wash, wash,
Wash your hands
Each and every one
Under nails and back and front
Washing can be fun!



# **PAL Says**

# Activity Description:

The educator will use a "Simon Says" game format to help reinforce healthy behaviors that the learners can practice regularly.

# Educational Objectives:

At the end of this activity, learners will be able to:

- 1. Recall/identify key concepts about lead and pesticide hazards.
- 2. Identify and practice protective health behaviors.
- 3. Differentiate between healthy and unhealthy behaviors.

# Assessed Quality Core Curriculum (QCC) Standards:

Health/PE (Grade: K) Strand: Personal health

Topic: Hygiene

**Standard:** Recognize the importance of basic personal hygiene habits required to maintain health and prevent illness or disease (i.e. proper hand washing and caring for teeth, gums, eyes, ears,

nose, skin, hair and nails).

Health/PE (Grade: K)
Strand: Personal health

Topic: Germs

**Standard:** Recognize that germs can cause sickness.

Health/PE (Grade: K) Strand: Personal health Topic: Decision making

Standard: Describe how personal health decisions can affect self

and others.

**Health/PE (Grade: K)** 

Strand: Alcohol, tobacco and other drugs

**Topic:** Poison (safety rules)

**Standard:** Practice safe behaviors when finding unknown or dangerous substances or objects (i.e. medicines, unmarked

containers)

#### **Grade Level:**

Kindergarten to 2<sup>nd</sup> grade



Time:

15 minutes



Materials Needed:

None

Health/PE (Grade: 1) Strand: Personal health

Topic: Hygiene

Standard: Explain reasons for keeping clean and well groomed.

Health/PE (Grade: 2) Strand: Personal health

**Topic:** Communicable diseases

Standard: State and demonstrate health practices that prevent the

spread of disease.

#### Rationale:

Children can play a great role in maintaining their own health as well as the health of other family members by practicing simple techniques such as washing their hands, removing their shoes after playing outside, and avoiding poisons and pesticides. This activity will reinforce these positive behaviors.

# Vocabulary:

**Germ:** small living things that you cannot see without a microscope that can make you sick

**Pesticides:** chemicals or organic agents used to kill insects, plants, rodents, fungi or microscopic organisms

**Poisons:** chemicals that can make you sick if breathed, swallowed, or touched (with an inherent property); (that) tend(s) to destroy life or impair health

#### Procedure:

Up to ten learners can participate in this activity together. The educator will:

- 1. Gather learners in circle.
- Explain rules: you are going to play the same game as "Simon Says" – need to do what "PAL says" but only if PAL says to do
  it
- 3. Start game by telling the learners to do whatever PAL says.
- 4. Sometimes initiate command by saying, "PAL says ..." (i.e. "PAL says, touch your nose")

# Optional Enrichment Activity:

Have a learner take the role of PAL – and continue to play PAL Says.

- 5. Sometimes initiate commands without saying, "PAL says ..." (i.e. "Put your hands near your mouth.") Then, before they have a chance to do so say, "Oops! PAL did not say 'Put your hands near your mouth' because it is not good to put your hands in or near your mouth because your hands may have lead, dirt, and germs on them. Always wash your hands before you put them near your mouth."
- 6. Give positive reinforcement when the learners follow game correctly.

#### Main Points:

- 1. Wash your hands before you eat, after playing outside, or after playing with a pet.
- 2. Run away from poisons and pesticides.



# Assessment:

- 1. Ask the learners to identify at least two health protective behaviors (e.g., wash hands, wash toys).
- 2. Ask the learners to identify at least two unhealthy behaviors (e.g., put hands in mouth, play near adults who smoke).

#### References and Resources:

None

# Be a PAL Coloring Book Activity

# **Activity Description:**

The learners will use the "PAL Activity Book" to learn key messages about hygiene and healthy eating.

# **Educational Objectives:**

At the end of the activity, the learners will be able to:

- 1. Describe when to wash their hands and toys.
- 2. Describe healthy snacks to others.

# Assessed Quality Core Curriculum (QCC) Standards:

Health/PE (Grade: K)

**Strand:** Disease prevention

Topic: Hygiene

**Standard:** Demonstrate the proper hand washing technique.

Health/PE (Grade: K)

Strand: Nutrition
Topic: Foods

**Standard:** Identify various foods by name.

**Health/PE (Grade: K)** 

**Strand:** Nutrition **Topic:** Foods

**Standard:** Select nutritious foods that contribute to good health.

Health/PE (Grade: 1)

**Strand:** Nutrition **Topic:** Food selection

**Standard:** Recognize the reasons people need variety, balance

and moderation in selecting foods.

Health/PE (Grade: 2) Strand: Nutrition Topic: Snacks

Standard: Distinguish between nutritionally sound snacks and

"junk food" (foods of minimal nutritional value).

#### **Grade Level:**

Kindergarten to 2<sup>nd</sup> grade



### Time:

5-30 minutes (depending on how much of activity book is used)



# Materials Provided:

"PAL Activity Book"

#### **Materials Needed:**

- 1. Pencils
- 2. Crayons

#### Rationale:

Lead poisoning is one of the most prominent environmental hazards facing children today. Lead gets into children's bodies when they swallow or breathe in dirt, dust, paint chips or fumes containing lead. Lead can be in things around the home or school such as paint chips, dust, or dirt on shoes.

Pesticides are chemicals designed to control or get rid of "pests" such as insects, rodents, weeds, and bacteria. Examples of common pesticides are roach and insect sprays, chlorine bleach, disinfectants, and flea and tick shampoos for pets. When used improperly, overused, or improperly stored out of children's reach, pesticides can result in serious health problems, especially for children. Homes, school, and other building use pesticides, which may settle in the air, on carpets, tables, and toys, and on the grass where children play. Bathrooms and kitchens are the rooms most likely to have pesticides not properly stored.

It is important for children to wash their hands after they have played outside and to wash their toys after playing with them. Children should also recognize the importance of eating nutritious foods.

#### Vocabulary:

**Fruits:** the edible part of a plant developed from a flower, with any accessory tissues, such as the peach, blueberry, or banana

**Household Products:** includes cleaners, disinfectants, pesticides, paint, paint strippers, wood preservatives, aerosol sprays, insect repellants, air fresheners, stored fuels automotive products and hobby supplies

**Lead:** a heavy metal that is hazardous to health if breathed or swallowed; it is found in old paint, dirt, and dust; a mineral that can be found in old paint, water, soil, and dust. Children can swallow lead or breathe lead-contaminated dust if they play in dust or dirt and put their fingers or hands in their mouth or on objects that they put in their mouth(s); poison that can make you sick

**Pesticides**: chemicals or organic agents used to kill insects, plants, rodents, fungi or microscopic organisms

**Vegetables:** any plant whose fruit, seeds, roots, tubers, bulbs, stems, leaves, or flower parts are used as food, such as the bean, beet, potato, onion, asparagus, spinach, or cauliflower

#### Procedure:

Educators should give learners a "PAL Activity Book" and instruct the learners to color the pictures and circle the words in the Word Find.

#### Main Points:

- 1. Wash your hands after playing outside.
- 2. Wash your toys after playing with them.
- 3. Eat nutritious snacks.

#### Assessment:

Ask the learners to share with others their favorite healthy snacks. Ask learners to tell others when it is important for them to wash their hands.

#### References and Resources:

Information Please. (2000). <u>Kid's Almanac</u>. [On-line] Available: http://www.kids.infoplease.com/

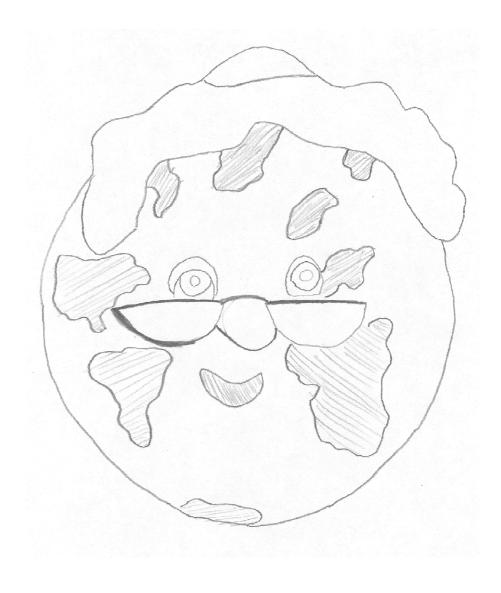
National Lead Information Center Hotline, (800) 424-LEAD.

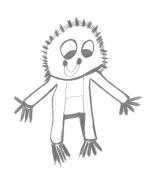
United States Environmental Protection Agency, Office of Children's Health Protection. (2000). <u>Food They Eat</u>. [On-line] Available: http://www.epa.gov/children/food.htm

# Optional Enrichment Activity:

Have learners draw pictures of their favorite snacks and favorite toys.

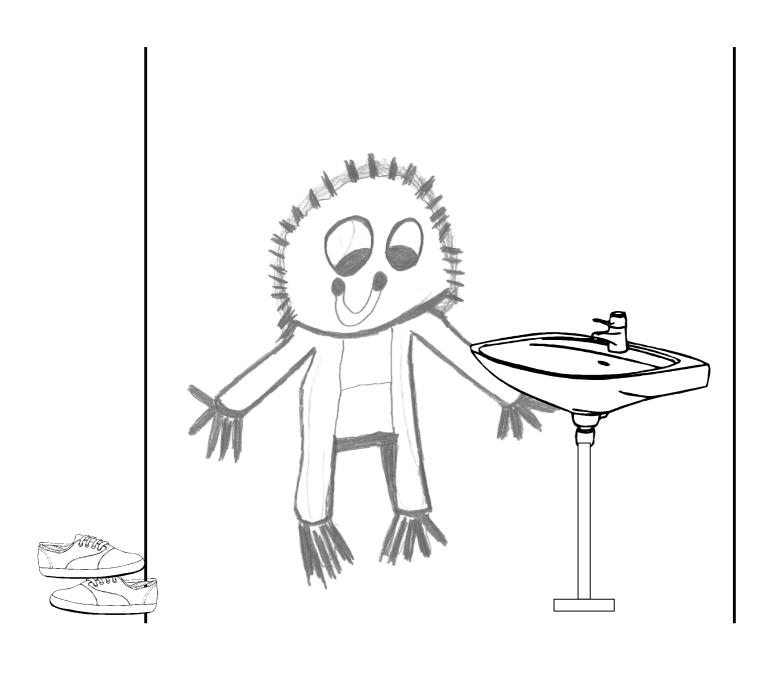
# PAL's



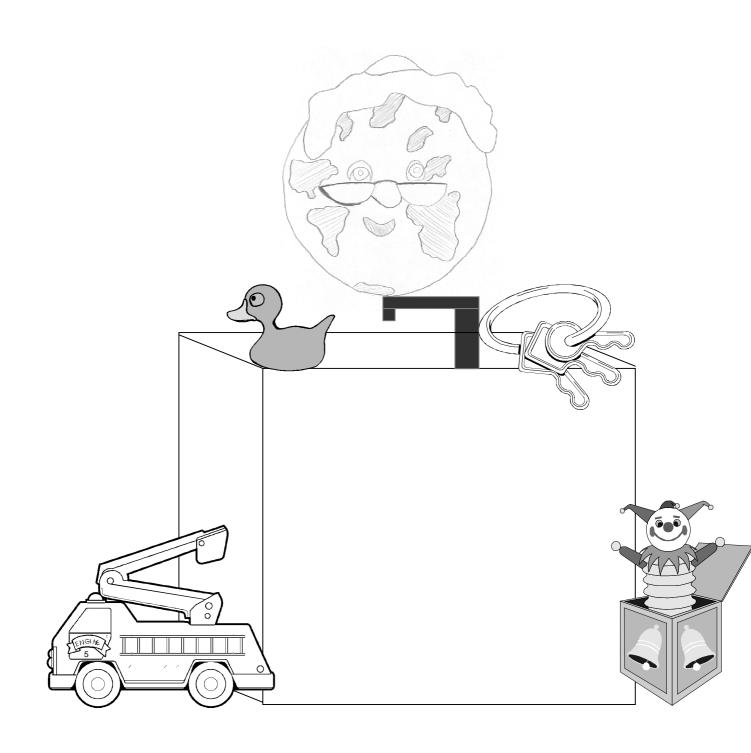


**Activity Book** 





Playing outside is fun, but don't forget to wash your hands when you are done! And remember to leave your shoes outside.



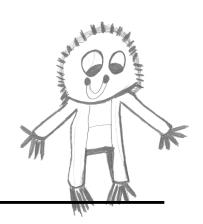
PAL says, "remember to wash your plastic toys after playing with them."



Fruits and vegetables make tasty, healthy snacks!

# **Word Find**



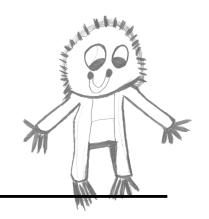


LEAD POISON SHOES PESTICIDE CLEAN WASHING PAL DIRT SAFE HEALTH CHILDREN TOYBATH

POISONFQULPR EXMANWSHOESL SFRFPALEYYDE TPLECSYAPGVE IULZCHILDREN CLEANIQTIKFS IRAAINOHRBBX DQDXLGYTTFDI ETOYBATHREOA

# **Word Find - Answers**

Find and circle these words:



LEAD POISON SHOES PESTICIDE CLEAN WASHING PAL DIRT

SAFE HEALTH CHILDREN TOYBATH

POISONFQULPR ENNWSHOEN EXMANWSHOEN SFRECHORE TPLZCHORE IQLEANQTRBB IQDXLGYTE ETOYBATHREOA

# **Section VI: Healthy Kids Have Safe Homes**

#### Introduction

This section is about having a safe home. Learners will understand that certain things should be stored out of reach in their houses. In addition, important safety rules will be reviewed to keep children safe at home, school, and in the community.

#### **Activities**

Safe House Sleuth (Kindergarten to 2nd grade)

Be Safety Smart (Kindergarten to 2nd grade)

Be a Home Detective (Kindergarten to 2nd grade)

### Safe House Sleuth

### Activity Description:

The educator will teach learners to recognize where various household items including pesticides and poisons should safely be stored in the house.

# **Educational Objectives:**

At the end of the activity, learners will be able to:

- 1. Identify items in their houses that should be safely stored out of reach.
- 2. Describe where dangerous items should be stored.

# Assessed Quality Core Curriculum (QCC) Standards:

Guidance (Grades: K, 1, 2) Strand: Career planning

**Topic:** Awareness of the interrelationship of life roles

**Standard:** Describe how family members depend on one another,

work together, and share responsibilities.

Health/PE (Grade: K)

Strand: Alcohol, tobacco and other drugs

**Topic:** Poison (safety rules)

**Standard:** Practice safe behaviors when finding unknown or dangerous substances or objects (i.e. medicines, unmarked

containers).

Health/PE (Grade: K) Strand: Family living

Topic: Roles

Standard: Discuss different ways children can contribute to and

benefit from their families.

**Health/PE (Grade: K)** 

Strand: Safety

**Topic:** Environmental safety

**Standard:** Recognize safe practices experienced in the home, at school, on the playground, in and around motor vehicles, on the

street, in aquatic environments and around animals.

#### **Grade Level:**

Kindergarten to 2<sup>nd</sup> grade



#### Time:

10-15 minutes per child



- 1. Felt board
- 2. Felt cut outs of kitchen scene: refrigerator, kitchen sink, cabinets
- 3. Felt cut outs of household items: milk carton, bag of chips, coffee can, cheese, ice cream, pill (vitamin) bottle
- 4. Felt cut outs of garage scene: car, locked cabinet, shelves
- 5. Felt cut outs of garage items: wagon, ball, insect spray, fertilizer, gasoline can, oil can
- 6. Felt letters (enrichment activity)

#### Rationale:

Pesticides are chemicals designed to control or get rid of "pests" such as insects, rodents, weeds, and bacteria. Examples of common pesticides are roach and insect sprays, chlorine bleach, disinfectants, and flea and tick shampoos for pets. Most pesticides are toxic chemicals. When used improperly, overused, or improperly stored out of children's reach, pesticides can result in serious health problems, especially for children. Therefore, it is important to teach children to identify potential poisons at home and stay away from them to prevent poisoning and injury.

### Vocabulary:

**Pesticides:** chemicals or organic agents used to kill insects, plants, rodents, fungi or microscopic organisms

**Poisons:** chemicals that can make you sick if breathed, swallowed, or touched (with an inherent property); (that) tend(s) to destroy life or impair health

#### Procedure:

One child and one adult should complete this activity together.

- 1. Create kitchen scene using felt cutouts and felt board
- 2. Have learner place kitchen items in proper storage place in the kitchen. If the learner does not know the identification of the items he or she has chosen and/or the proper place to put these items, assist the learner in this process.
- 3. Repeat this process for the garage scene
- 4. Tell the learner if items are safe, they can be put in places where everyone can find them, both children and adults.
- 5. After the learner has put the items in the house, ask him/her the reasoning behind their choices. Provide the learner with verbal feedback based upon their performance.
- 6. The educator should make sure that all pesticides and poisons are placed in the proper storage places in the house. Tell the learners that poisons are very dangerous. They need to go up, up and away! Parents should always place poisons in safe places. Children should not touch any dangerous poisons.
- 7. Throughout the activity, the educator should tell why he/she is placing the items in this storage place.

# Optional Enrichment Activity:

- The learners can conduct a safety check of their own kitchen and garage at home with a parent or guardian.
- Use felt letters to spell names of different felt items

#### Main Points:

- 1. Know where to place items so they are safe and will not hurt you.
- 2. Lock poisons up so they will not hurt you.



# Assessment:

- 1. Ask the learner to name two of the items that were dangerous (e.g., insect spray, fertilizer, gasoline can).
- 2. Ask the learner to describe places in which dangerous items should be stored (e.g., locked cabinet, high shelf).

#### References and Resources:

Information Please. (2000). <u>Kid's Almanac</u>. [On-line] Available: http://www.kids.infoplease.com/

United States Environmental Protection Agency, Office of Children's Health Protection. (2000). <u>Food They Eat</u>. [On-line] Available: http://www.epa.gov/children/food.htm

# **Be Safety Smart**

#### **Activity Description:**

This lesson will teach learners about the hazards of poisons such as pesticides, cleaners, and lead. They will be able to recognize different poisons and learn how to avoid them and tell their support system about them.

# **Educational Objectives:**

At the end of the activity, learners will be able to:

- 1. Explain the importance of observing safety rules.
- 2. Identify potential environmental hazards at home, school, and in the community.
- 3. Explain how to seek help.

# Assessed Quality Core Curriculum (QCC) Standards:

Health/PE (Grade: K)

Strand: Alcohol, tobacco and other drugs

**Topic:** Poison (safety rules)

**Standard:** Practice safe behaviors when finding unknown or dangerous substances or objects (i.e. medicines, unmarked

containers)

Health/PE (Grade: 1)

Strand: Alcohol, tobacco and other drugs

**Topic:** Poison (safety rules)

**Standard:** Know reasons for not eating or drinking potentially

dangerous substances provided by strangers or others.

Health/PE (Grade: K)

Strand: Safety

**Topic:** Environmental safety

**Standard:** Recognize safe practices experienced in the home, at school, on the playground, in and around motor vehicles, on the

street, in aquatic environments and around animals.

Health/PE (Grade: 2)

Strand: Safety

**Topic:** Environmental Safety

**Standard:** Distinguish between safe and unsafe places to play in

the home, school, and neighborhood.

#### **Grade Level:**

Kindergarten to 2<sup>nd</sup> grade



Time:

25 minutes



# Materials Provided:

- "What is Lead?" worksheet
- 2. "Poisons in the Home" worksheet
- 3. "Be Safety Smart" worksheet
- 4. "Stay Away From Poisons" worksheet

#### **Materials Needed:**

1. Pencils

Health/PE (Grades: K, 1, 2)

**Strand:** Safety **Topic:** Resources

**Standard:** Identify local support system concerning personal safety

(i.e. family, teacher, religious advisor, friend and counselor).

#### Rationale:

Pesticides are chemicals designed to control or get rid of "pests" such as insects, rodents, weeds, and bacteria. Examples of common pesticides are roach and insect sprays, chlorine bleach, disinfectants, and flea and tick shampoos for pets. When used improperly, overused, or improperly stored out of children's reach, pesticides can result in serious health problems, especially for children. Homes, school, and other building use pesticides, which may settle in the air, on carpets, tables, and toys, and on the grass where children play. Bathrooms and kitchens are the rooms most likely to have pesticides not properly stored.

Lead poisoning is one of the most prominent environmental hazards facing children today. Lead gets into children's bodies when they swallow or breathe in dirt, dust, paint chips or fumes containing lead. Lead can be in things around the home or school such as paint chips, dust, or dirt on shoes. A major source of lead poisoning is lead-based paint. When painted surfaces become old or degrade, dust or paint chips that fall off onto to windowsills, floors, or outdoors may contain lead.

Helping children identify potential hazards such as poisons, pesticides, and lead will keep them safe. Children should learn to recognize these hazards, stay away from them, and tell their parents or teachers about these hazards when they see them.

### Vocabulary:

**Poisons:** chemicals that can make you sick if breathed, swallowed, or touched (with an inherent property); (that) tend(s) to destroy life or impair health

**Lead:** a heavy metal that is hazardous to health if breathed or swallowed; it is found in old paint, dirt, and dust; a mineral that can be found in old paint, water, soil, and dust. Children can swallow lead or breathe lead-contaminated dust if they play in dust or dirt and put their fingers or hands in their mouth or on objects that they put in their mouth(s); poison that can make you sick

#### Procedure:

- 1. Tell learners: We will be discussing ways to "Be Safety Smart" at home.
- 2. Hand out the worksheet, "What is Lead?"
- 3. Tell them that lead is a poison that can hurt you. It can be found in old paint on the walls or windowsill, dirt, or dust. To be safety smart, don't put paint chips, dirt, or dust in your mouth
- 4. Hand out the worksheet, "Poisons in the Home." Tell them poisons are things that can make them sick. Many things used around the house are for grown-ups and not for kids (e.g., gasoline, bug spray, cleaning detergent).
- 5. Review over the types of poisons that they may find in the home such as cleaning bottles, insect spray, paints, pills, gas, bleach. Ask them if they can you think of other poisons in the home?
- 6. Tell them that eating, swallowing, smelling or touching poisons can make them sick.
- 7. Hand out the worksheet, "Be Safety Smart." Review the safety rules.
- 8. Hand out the worksheet, "Stay Away from Poisons." Have learners complete the worksheet and share the things that they marked the **X** on.

#### Main Points:

- 1. Stay away from poisons that can hurt you.
- 2. Do not put poisons in your mouth.
- 3. Ask adults before eating or drinking anything.
- 4. Tell adults if you see or smell anything bad or funny.



# Assessment:

- 1. Ask learners what are poisons.
- 2. Ask learners to give you some examples of poisons found in the home.
- 3. Ask learners what they should do if they see a poison.

### References and Resources:

American Association of Poison Control Centers 3201 New Mexico Avenue, Suite 310 Washington, DC 20016

Phone: (202) 362-7217 Email: aapcc@poison.org Web site: http://www.aapcc.org/

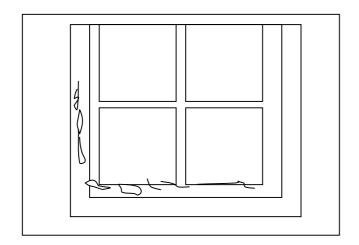
Internet Public Library, Poison Prevention. (1998). <u>Poison Prevention</u>. [On-line] Available:

http://ipl.lub.lu.se/youth/poisonsafe/kjump.html

# What is Lead?

Lead is a poison. It can be in things in and around your home.

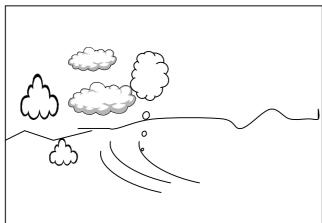
It can be in:



Paint chips



Dirt on your shoes



**Dust** 

Safety Rule: Don't put these things in your mouth.

# **Poisons in the Home**

A poison is something that can make you sick. Many things used around the house are for grownups and not for kids.

These are some poisons found in the home. Can you think of other poison in the home?

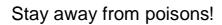




Eating, swallowing, smelling, touching, or playing with poisons can make you sick.



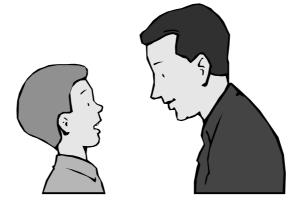








Tell a grown-up anytime you smell anything "funny" or see poisons out or spilled. Always **ASK** first before eating or drinking anything.



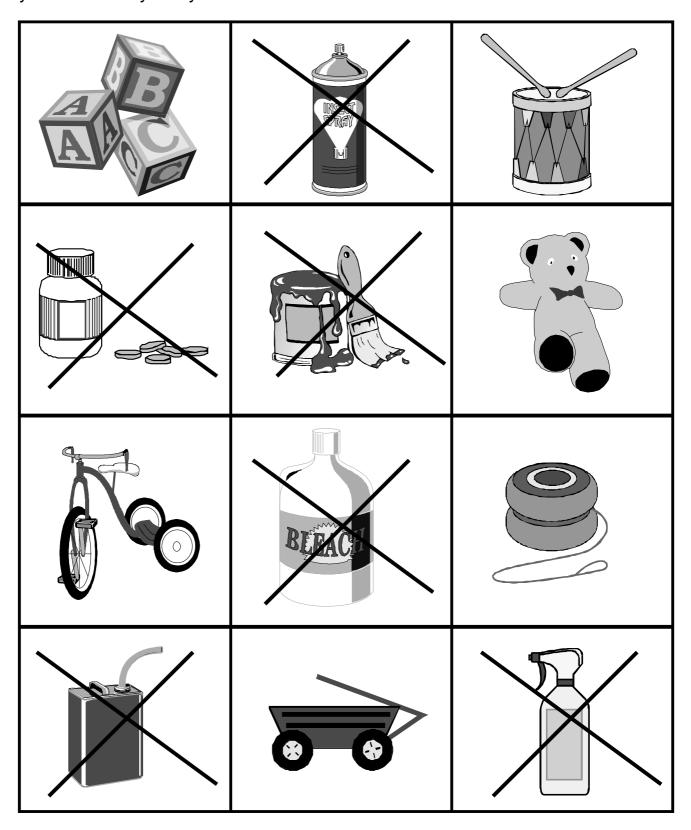
# **Stay Away From Poisons**

Look at the pictures in each box. Put an  ${\bf X}$  on the picture of things that you should stay away from.



# **Stay Away From Poisons Answers**

Look at the pictures in each box. Put an  ${\bf X}$  on the picture of things that you should stay away from.



### Be a Home Detective

# Activity Description:

This activity will teach learners how to evaluate their home for safety. Learners will be able to identify both bad and good things in their home environment. Learners are encouraged to complete this activity with an adult that lives in their home.

# **Educational Objectives:**

At the end of the activity, learners will be able to:

- 1. Identify potential environmental hazards in the home.
- 2. Identify positive safety features in the home.
- 3. Explain how to seek help when necessary.

# Assessed Quality Core Curriculum (QCC) Standards:

Health/PE (Grade: K)

Strand: Safety

**Topic:** Environmental safety

**Standard:** Recognize safe practices experienced in the home, at school, on the playground, in and around motor vehicles, on the

street, in aquatic environments and around animals.

Health/PE (Grade: 2)

Strand: Safety

**Topic:** Environmental safety

Standard: Distinguish between safe and unsafe places to play in

the home, school, and neighborhood.

Health/PE (Grade: K, 1, 2)

**Strand:** Safety **Topic:** Resources

**Standard:** Identify local support system concerning personal safety

(i.e. family, teacher, religious advisor, friend and counselor).

Health/PE (Grade: 1)

Strand: Safety

**Topic:** Accident prevention

**Standard:** Demonstrate ways to prevent and respond to accidents

in and around the home.

#### **Grade Level:**

Kindergarten to 2<sup>nd</sup> grade



#### Time:

20 minutes (plus additional time at home)



# Materials Provided:

- 1. "Home Safety Checklist" worksheet
- 2. "Parents' Letter"
- 3. "Facts About Lead"4. "Facts About
- Pesticides"
  5. "Facts About
- Secondhand Smoke" 6. "Emergency Phone
- List" worksheet
- 7. "Who To Call" worksheet

#### **Materials Needed:**

1. Pencils

Health/PE (Grade: 2) Strand: Personal health

**Topic:** Sanitation

Standard: Recognize ways to prevent disease by keeping the

home, school, and community clean.

#### Rationale:

Households are full of potential environmental dangers. It is important for children to recognize these dangers – as well as to recognize positive safety features. By identifying potential dangers, children can stay away from them and tell their parents when they see them.

### Vocabulary:

**Lead:** a heavy metal that is hazardous to health if breathed or swallowed; it is found in old paint, dirt, and dust; a mineral that can be found in old paint, water, soil, and dust. Children can swallow lead or breathe lead-contaminated dust if they play in dust or dirt and put their fingers or hands in their mouth or on objects that they put in their mouth(s); poison that can make you sick

**Poisons:** chemicals that can make you sick if breathed, swallowed, or touched (with an inherent property); (that) tend(s) to destroy life or impair health

**Household Products:** includes cleaners, disinfectants, pesticides, paint, paint strippers, wood preservatives, aerosol sprays, insect repellants, air fresheners, stored fuels automotive products and hobby supplies

**Pesticides:** chemicals or organic agents used to kill insects, plants, rodents, fungi or microscopic organisms

### Procedure:

- 1. Tell learners that they will become environmental safety detectives in their homes.
- 2. Hand them the "Home Safety Checklist," "Parents' Letter," and fact sheets (lead, pesticides, secondhand smoke)

- 3. Explain to the learners that the worksheet has a list of good things they should find in their homes and bad things that they should not find in their homes.
- 4. Review the worksheet by explaining to them which things are good and which are bad.
- 5. Ask the learners to give the "Parents' Letter" and fact sheets to an adult in their home.
- 6. Tell the learners that, with an adult's help, they are to look for these things at their home.
- 7. Then give the learners the worksheet, "Emergency Phone List."
- 8. Ask the learners to complete this sheet with an adult in their house.
- 9. Tell the learners that they should tape the phone list by a telephone in their home.
- 10. The following day, have the learners share their experience finding good and bad things in their home. Also have the learners tell others where they put the "Emergency Phone List."

#### Main Points:

- 1. Stay away from poisons in your home.
- 2. When you finish playing, clean up after yourself.
- 3. Wash your hands with soap and water.
- 4. Recycle.
- 5. Know who to call in an emergency.



#### Assessment:

- 1. Ask learners what good things they found in their homes.
- 2. Ask learners what bad things they found in their homes.
- 3. Ask learners where they taped the "Emergency Phone List."

#### References and Resources:

Internet Public Library. (1998) Where Can You Find Poisons? [Online] Available:

http://ipl.lub.lu.se/youth/poisonsafe/kwhere.html.

# Optional Enrichment Activity:

- Have learners be detectives in their classroom or school environment.
- Distribute the "Who To Call" worksheet. Have the learners identify the pictures and discuss when you should call each emergency worker.

# **Home Safety Checklist**

Be a good junior sleuth and look for good safety in your home. For each thing that you find, put a check mark in the box. Do this activity with an adult who lives in your home.

Soap by the kitchen sink.

	Family recycles glass.
	Find out what year your home was built:
	Soap by the bathroom sink.
	Home has smoke detectors.  If YES, how many:
	List of emergency numbers is by the phone.
	Closet and cabinet doors are kept closed.
	Family recycles newspaper.
	Toys are not on floor or steps.
	Family has a fire escape plan.
	Adults do not smoke in the house.
	Paint is old and flaking off the wall and/or ceiling.
	Family has fire extinguisher.
	Cleaning detergents are locked in a cabinet.
	Medicine is put in a cabinet or out of reach of children.
	Floor mats are by the door – so you can wipe your feet.
П	Family recycles aluminum cans



### **Dear Parents:**

It is important to be aware of potential environmental health hazards that are in your home. Some of these hazards include **lead**, **pesticides**, and **second-hand smoke**.

Your child has brought home a Safety Checklist and fact sheets to provide you with information about potential environmental health dangers.

Please walk around your home with your child and look for the items on the checklist.

Thank you.

#### Facts About Lead

Lead poisoning is one of the biggest environmental hazards facing children today. Lead gets into children's bodies when they swallow or breathe in dirt, dust, paint chips or fumes containing lead. It is hard to recognize signs of lead poisoning because a person cannot see, taste, or smell lead.

Lead can be in things around the home or school such as paint chips, dust, or dirt on shoes. A major source of lead poisoning is lead-based paint. When painted surfaces become old or degrade, dust or paint chips that fall off onto to windowsills, floors, or outdoors may contain lead. Paint dust or chips can stick to toys, fingers, and other objects that children will put into their mouths. Although lead paint was banned in 1978, homes and buildings constructed prior to this date probably contain lead-based paint.

Drinking water is another source of lead poisoning. Lead gets into drinking water when old pipes in homes or buildings or corrode, or when lead solder is used to connect pipes. Children in homes with pipes made before the 1930's with solid lead are at great risk. Water that has sat for awhile in pipes or is hot will have more lead. To reduce the lead threat in water, let tap water run for a few minutes before using and only use water from the cold-water tap for cooking and drinking. Other sources of lead are plastic window blinds made outside of the US, art, hobby, and craft supplies, gasoline for vehicles, decorative pottery and dishes, and old painted toys. Lead can be detected in children through a simple blood test.

### Key Messages for Children:

- Wash your hands often, especially after playing outdoors, touching an animal, before eating, or after touching paint chips, dust, or dirt.
- Keep thing like fingers, toys, paint chips, dirt, and other objects out of their mouths.
- Eat fruits and vegetables to help their bodies grow and to protect against lead.

#### Key Messages for Parents:

- Wash toys, stuffed animals and pacifiers regularly.
- Teach your child to make hand washing a habit.
- Clean window sills and hard floors with a damp cloth or mop.
- Try other hobbies that do not involve lead. Hobbies that may have lead are making pottery, stained glass, hunting and fishing. You can transfer lead dust from yourself to your child.
- If you work with lead in your job, shower and change clothes before going home.
   Jobs that may involve lead include battery manufacturing, auto repairs, and construction.
- If you think your child is at risk, talk to your health care provider and have your child tested for lead.

#### **Facts about Pesticides**

Pesticides are chemicals designed to control or get rid of "pests" such as insects, rodents, weeds, and bacteria. Examples of common pesticides are roach and insect sprays, chlorine bleach, disinfectants, and flea and tick shampoos for pets. Even though pesticides are beneficial to society, they can be dangerous to people. Most pesticides are toxic chemicals. When used improperly, overused, or improperly stored out of children's reach, pesticides can result in serious health problems, especially for children.



Homes, school, and other building use pesticides, which may settle in the air, on carpets, tables, toys, and on the grass where children play. The Environmental Protection Agency (EPA) reports that almost half of all households with children less than five years have at least one pesticide stored in an unlocked cabinet. Bathrooms and kitchens are the rooms most likely to have pesticides not properly stored.

### Key Messages for Children:

- Stay away from chemicals or poisons.
- Keep thing like fingers, toys, paint chips, dirt, and other objects out of their mouths.

#### Key Messages for Parents:

- Store pesticides out of children's reach, preferably in locked cabinets.
- Always read and follow directions carefully when applying pesticides.
- Make sure children, their toys, and pets are not allowed in areas where pesticides will be or were recently used, and always use pesticides in well-ventilated areas.
- Do not transfer pesticides to other containers such as soda bottles or milk jugs that children may associate with food or drink.
- Use integrated pest management (IPM) to reduce exposure to pesticides. Instead
  of relying solely on pesticides to control pests, IPM promotes using natural
  biological pest control methods, such as introducing natural predators and using
  the smallest amount of the best pesticide for the job. It also promotes caulking
  cracks, using insect traps, repairing leaks and keeping food in containers to
  remove the elements-food, shelter, and water-that pests need to survive.

#### **Facts About Secondhand Smoke**

Secondhand smoke, or environmental tobacco smoke (ETS), is a mixture of smoke given off by a cigarette, pipe, or cigar, and exhaled by smokers. It is a serious health risk to children because it may harm their developing lungs. The EPA estimates that between 150,000 and 300,000 infants and small children each year develop respiratory infections, such as bronchitis and pneumonia, due to ETS exposure. The Centers for Disease Control and Prevention (CDC) reports that children exposed to ETS every day miss a third more school days due to colds and infections than kids not exposed to smoke at home. Other effects of smoke on children include coughing and wheezing, chest pains, and ear infections. Another harmful effect of smoke is asthma in children. It may also cause more frequent and severe asthma attacks in asthmatic children, and it may even cause non-asthmatic children to develop the condition.

The major source of ETS for young children is in their home. A recent study estimates that family members smoking in the home expose 43 % of US children to ETS. ETS exposure can also occur when a child enters a room where someone was recently smoking. It is important for people who smoke to smoke outdoors or in areas where children do not go.

# Key Messages for Children:

Stay away from tobacco smoke.

#### Key Messages for Parents:

 Do not smoke or allow other people to smoke in your home and do not smoke in the house or enclosed areas such as cars.
 Open windows to let out smoke.



# **Emergency Phone List**

Fill in the following information.

Emergency Numbers:	
Police:	
Fire:	
Doctor:	
Doctor:	
Other:	
Other:	
Call 911	

Cut out the information and put it near your phone at home.

# Who To Call

When would you need each of the people or things in the pictures?



Safety is important!

# **Section VII: Glossary of Key Terms**

Alter to change

**Chemical** substance characterized by molecular composition used in

factories, farms, and homes for a variety of purposes such as

cleaning, tanning, killing pests, and helping to maintain

vehicles

**Fruits** the edible part of a plant developed from a flower, with any

accessory tissues, such as the peach, blueberry, or banana

**Germ** small living things that you cannot see without a microscope

that can make you sick

Household Products

includes cleaners, disinfectants, pesticides, paint, paint

strippers, wood preservatives, aerosol sprays, insect repellants, air fresheners, stored fuels automotive products

and hobby supplies

**Lead** a heavy metal that is hazardous to health if breathed or

swallowed; it is found in old paint, dirt, and dust; a mineral that can be found in old paint, water, soil, and dust. Children can swallow lead or breathe lead-contaminated dust if they play in dust or dirt and put their fingers or hands in their mouth or on objects that they put in their mouth(s); poison

that can make you sick

**Pesticides** chemicals or organic agents used to kill insects, plants,

rodents, fungi or microscopic organisms

**Poisons** chemicals that can make you sick if breathed, swallowed, or

touched (with an inherent property); (that) tend(s) to destroy

life or impair health

**Recover** to adapt to a new use

**Reuse** to use material again

**Recycle** to collect and process to be used again in a form similar to its

original form such as old newspapers used to make new

ones

Secondhand

**Tobacco Smoke** a mixture of smoke given off by the burning end of a

cigarette, pipe or cigar and the smoke exhaled from the

lungs of a smoker

**Solid waste** any trash that is not a liquid

**UV rays** ultraviolet rays come from the sunlight, and can burn skin

and seriously harm people's health

Vegetables any plant whose fruit, seeds, roots, tubers, bulbs, stems,

leaves, or flower parts are used as food, such as the bean,

beet, potato, onion, asparagus, spinach, or cauliflower

# **Section VIII: Resources and References**

This section identifies and describes information on a variety of topics related to children's environmental health. The information has been divided into categories for easy reference.

Resource categories are as follows:

General Organizations

- Information on Environmental Exposures by Topic
- Websites
- Books

The intended audiences for these materials are identified by the following codes:

- E Educator
- P Parent
- G General
- C Children

### **General Organizations**

# American Academy of Pediatrics, Committee on Environmental Health

141 Northwest Point Blvd./PO Box 927 Elk Grove Village, IL 60009-0927

Phone: (847) 228-5005 Fax: (847) 228-5097

Website: http://www.aap.org

The American Academy of Pediatrics (AAP) is committed to the attainment of optimal physical, mental and social health for all infants, children, adolescents and young adults.

Audience - P, E, G

#### **Children's Environmental Health Network**

110 Maryland Avenue NE, Suite 511 Washington, DC 20002 Phone: (202) 543-4033

Fax: (202) 543-8797

Website: http://www.cehn.org/

The Children's Environmental Health Network is a national multidisciplinary project dedicated to promoting a healthy environment and to protecting children from environment. It has great links to other agencies and resources.

Audience - P, E, G

#### **Environmental Health Education Center**

28 East Ostend St. Baltimore, MD 21230 Phone: (410) 706-1849

Fax: (410) 706-0295

The overall mission of the Environmental Health Education Center is to engage in research and provide training and education programs on topics related to occupational and environmental health and safety. The audiences for our training and education programs include professionals, labor, industry and community members.

Audience - P, E, G

# **Centers For Disease Control and Prevention, National Center for Environmental Health**

4770 Buford Hwy. NE (F-29) Atlanta, GA 30341-3724 Phone: (770) 488-7020 Fax: (770) 488-7042

Website: http://www.cdc.gov/nceh/

The National Center for Environmental Health, Centers for Disease Control and Prevention (CDC) provides national leadership, through science and service, to promote health and quality of life by preventing and controlling disease, birth defects, disability, and death resulting from interactions between people and their environment.

Audience – P, E, G

#### **National Institute of Environmental Health Sciences**

Building 31, Room B1C02/31 Center Dr.

MSC 2256

Bethesda, MD 20892-2256 Phone: (301) 496-3511 Fax: (301) 496-0563

Website: http://www.niehs.nih.gov/

The National Institute of Environmental Health Sciences (NIEHS) aims to reduce the burden of environmentally associated diseases and dysfunctions by defining how environmental exposures affect our health and how people differ in their susceptibility to these effects.

Audience - P. E. G

#### **National PTA**

330 N. Wabash Ave., Ste. 2100 Chicago, IL 60611-3690

Phone: (312) 670-6782 Fax: (312) 670-6783 Website: http://www.pta.or

The mission of the National PTA is to support and speak on behalf of children and youth in the school and in the community. It assists parents in developing the skills they need to raise and protect their children and to encourage parent and public involvement in the public schools.

National PTA Leader's Guide to Environmental Issues: Environmental Action and Awareness Project

http://www.pta.org/programs/envgde.htm

Audience – P, E, G

# US Environmental Protection Agency, Office of Children's Health Protection

401 M St. SW, Mail Code 1102

Washington, DC 20460 Phone: (202) 260-7778 Fax: (202) 260-4103

Website: http://www.epa.gov

The Office of Children's Health Protection protects children's health as a fundamental goal of public health and environmental protection in the United States.

Audience - P, E, G

# Information On Environmental Exposures By Topic

#### Lead:

#### **National Lead Information Center**

8601 Georgia Ave Suite 503 Silver Spring, MD 20910 Phone: 1-800-424-LEAD

Fax: 301-585-7976

E-mail: hotline.lead@epamail.epa.gov Website: http://www.epa.gov/lead/nlic.htm

The National Lead Information Center (NLIC) provides the general public and professionals with information about lead hazards and their prevention.

Audience - P, E, G

#### Environmental Tobacco Smoke:

### **American Cancer Society**

1599 Clifton Rd. NE Atlanta, GA 30329

Phone: 1-800-ACS-2345 or (404) 329-7686

Fax: (404) 321-4669

Website: http://www.cancer.or

The American Cancer Society (ACS) is the nationwide voluntary health organization whose mission is to eliminate cancer as a major health problem by preventing cancer, saving lives from cancer, and diminishing suffering from cancer through research, education and service.

Audience - P, E, G

### **American Lung Association**

1726 M St. NW, Suite 902 Washington, DC 20036-4502

Phone: 1(800)LUNGUSA or (202) 785-3355

Fax: (202) 452-1805

Website: http://www.lungusa.org

The American Lung Association (ALA)'s mission is to prevent lung disease and promote lung health by helping those who are already affected by disease, by researching for cures and better treatments, and by protecting all our lungs from the threat of environmental hazards.

Audience - P, E, G

#### Pesticides:

#### **National Pesticide Telecommunications Network**

Oregon State University 333 Weniger Corvallis, OR 97331-6502

Phone: 1-800-858-7378 Fax: 541-737-0761

E-mail: nptn@ace.orst.edu

Website: http://ace.orst.edu/info/nptn/

The National Pesticide Telecommunications Network (NPTN) provides objective, science-based information about a wide variety of pesticide-related subjects.

Audience – P, E, G

#### **Pesticides Education Center**

P.O. Box 420870

San Francisco, CA 94142 Phone: 415-391-8511

Fax: 415-391-9159

E-mail: pec@igc.apc.org

Website: http://www.igc.org/pesticides/

The Pesticide Education Center is a non-profit organization founded to educate workers and the public about the hazards of pesticides to human health and the environment.

Audience - P, E, G

#### Poisons:

# **Internet Public Library Poison Prevention**

Website: http://ipl.lub.lu.se/youth/poisonsafe/phome.html

This site offers information, tips, assessments, and poison proofing guidelines for parents to keep their kids safe from poisons.

Audience - P, E, G

#### Radon:

#### **National Radon Hotline**

Phone: 800-SOS-RADON

The National Safety Council's Environmental Health Center (EHC) operates a National Radon Hotline under a grant from the Environmental Protection Agency. People calling the Hotline receive a packet of information about radon and a coupon for a low-cost radon test kit.

Audience - P, E, G

#### **Websites**

#### General Websites:

#### Ask NOAH about Environmental Health

Website: http://www.noah.cuny.edu/environment/environ.html

NOAH provides high quality full-text health information for consumers that is accurate, timely, relevant and unbiased. New York Online Access to Health (NOAH) is a project with New York partners who have worked together on a variety of projects for 26 years: The City University of New York, The Metropolitan New York Library Council, The New York Academy of Medicine and The New York Public Library.

Audience - P, E, G, C

#### Websites On The Environment For Children:

# American Forest Foundation: Project Learning Tree

http://www.plt.org/

Site gives information about an interdisciplinary environmental education program for educators working with students in pre-kindergarten through grade 12 that helps students gain awareness and knowledge of the natural and built environment, their place within it, as well as their responsibility for it.

#### Care2

http://www.Care2.com/community/trivia/

Site contains a monthly trivia quiz on environmental issues.

#### Earth Day at Kids Domain

http://www.kidsdomain.com/holiday/earthday/index.html

Site has history, activities, songs, online games, and other fun resources related to Earth Day.

#### **Ecokids Online**

http://ecokids.sympatico.ca/hub.htm

Site is sponsored by Earth Day Canada and contains games, activities, and fact sheets for children on a range of environmental issues.

### **Environmental Health Center: Kid's Corner**

http://www.nsc.org/ehc/kidscorn.htm

Site offers print and play games such as word searches, crossword puzzles, and mazes, and environmental activities for children.

# Environmental Protection Agency (EPA)'s Explorers' Club

http://www.epa.gov/kids/

Site offers activities and information on you & your environment, plants, water, air, and garbage and recycling. The clubhouse has an art room, game room, and science room for kids to explore.

# National Institute of Environmental Health Sciences Kids' Pages Website: http://www.niehs.nih.gov/kids/home.htm

Site has stories, songs, activities, and games for kids related to nature and the environment.

# Websites For Environmental Health Topics For Children:

# **Internet Public Library Poison Prevention Kids Starting Point**

Website: http://ipl.lub.lu.se/youth/poisonsafe/kjump.html

This site offers interactive web pages for kids to help them learn how to keep safe from poisons.

# National Center for Environmental Health, Centers for Disease Control and Prevention's Kids' Page

http://www.cdc.gov/nceh/about/ncehkids/99kidsday/default.htm

Site offers interactive information on asthma, lead poisoning, and global health to name a few.

#### **Books**

# Raising Children Toxic Free: How to Keep Your Child Safe from Lead, Asbestos, Pesticides, and Other Environmental Hazards

Herbert L. Needleman, Philip J. Landrigan / Farrar, Straus & Giroux, Incorporated / 1994

Audience - P, E, G

#### Handbook of Pediatric Environmental Health

American Academy of Pediatrics / 1999

Audience - P, E, G